Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

Module Catalogue

for the Subject

Economathematics

as a Master's with 1 major

with the degree "Master of Science"

(120 ECTS credits)

Examination regulations version: 2016
Responsible: Faculty of Mathematics and Computer Science
Responsible: Faculty of Management and Economics

Contents

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Learning Outcomes

German contents and learning outcome available but not translated yet.

Wissenschaftliche Befähigung

- Die Absolventinnen und Absolventen sind geschult in analytischem Denken, besitzen ein stark ausgeprägtes Abstraktionsvermögen, universell einsetzbare Problemlösungskompetenz und die Fähigkeit, komplexe ökonomische Zusammenhänge zu strukturieren.
- Die Absolventinnen und Absolventen sind in der Lage, sich selbständig mithilfe von Fachliteratur in aktuelle Forschungsgebiete der Mathematik und Wirtschaftswissenschaften einzuarbeiten.
- Die Absolventinnen und Absolventen sind in der Lage, ihre Kenntnisse, Ideen und Problemlösungen zu komplexen Sachverhalten einem Fachpublikum gegenüber verständlich zu präsentieren.
- Die Absolventinnen und Absolventen besitzen die für selbstständiges wissenschaftliches Arbeiten, insbesondere für ein Promotionsstudium erforderlichen Fachkenntnisse, Denk- und Arbeitsweisen und Methodenkenntnisse.
- Die Absolventinnen und Absolventen kennen die Regeln guter wissenschaftlicher Praxis und sind in der Lage, sie bei umfangreichen Arbeiten zu beachten.
- Die Absolventinnen und Absolventen besitzen weiterführende Kenntnisse aktueller Gebiete der Mathematik und Wirtschaftswissenschaften und können sicher mit fortgeschrittenen Methoden dieser Gebiete umgehen.
- Die Absolventinnen und Absolventen besitzen vertiefte Kenntnisse und Überblick über die aktuelle Forschung in mindestens einem Teilgebiet der Mathematik sowie zwei Teilgebieten der Wirtschaftswissenschaften.
- Die Absolventinnen und Absolventen können in aktuellen Gebieten der Wirtschaftswissenschaften mathematische Methoden zur Anwendung bringen.

Befähigung zur Aufnahme einer Erwerbstätigkeit

- Die Absolventinnen und Absolventen sind geschult in analytischem Denken, besitzen ein stark ausgeprägtes Abstraktionsvermögen, universell einsetzbare Problemlösungskompetenz und die Fähigkeit, komplexe ökonomische Zusammenhänge zu strukturieren.
- Die Absolventinnen und Absolventen sind in der Lage, ihre Kenntnisse, Ideen und Problemlösungen zielgruppenorientiert verständlich zu formulieren und zu präsentieren.
- Die Absolventinnen und Absolventen sind in der Lage, komplexe volks- und betriebswirtschaftliche Probleme zu erkennen, strukturieren und modellieren, mit mathematischen Methoden Lösungswege zu entwickeln und diese Ergebnisse zu interpretieren und bewerten.
- Die Absolventinnen und Absolventen besitzen ein ausgeprägtes Durchhaltevermögen bei der Lösung komplexer Probleme innerhalb eines vorgegeben Zeitrahmens.
- Die Absolventinnen und Absolventen sind in der Lage, konstruktiv und zielorientiert mit hoher Team- und Kommunikationsfähigkeit in Gruppen zu arbeiten und hierbei Verantwortung zu tragen.
- Die Absolventinnen und Absolventen sind in der Lage, sich neue Wissensgebiete und aktuelle Entwicklungen selbständig, effizient und systematisch zu erschließen.
- Die Absolventinnen und Absolventen besitzen die Fähigkeit, Projekte in interdisziplinär zusammengesetzten Teams im Bereich der Mathematik und Wirtschaftswissenschaften verantwortlich mitzugestalten.

Persönlichkeitsentwicklung

- Die Absolventinnen und Absolventen sind geschult in analytischem Denken, besitzen ein stark ausgeprägtes Abstraktionsvermögen, universell einsetzbare Problemlösungskompetenz und die Fähigkeit, komplexe ökonomische Zusammenhänge zu strukturieren.

- Die Absolventinnen und Absolventen sind in der Lage, in partizipativen Prozessen gestaltend mitzuwirken.
- Die Absolventinnen und Absolventen besitzen ein ausgeprägtes Durchhaltevermögen bei der Lösung komplexer Probleme innerhalb eines vorgegeben Zeitrahmens.
- Die Absolventinnen und Absolventen sind in der Lage, komplexe Ideen und Lösungsvorschläge allgemeinverständlich zu formulieren und professionell zu präsentieren.

Abbreviations used

Course types: **E** = field trip, **K** = colloquium, **O** = conversatorium, **P** = placement/lab course, **R** = project, **S** = seminar, **T** = tutorial, **Ü** = exercise, **V** = lecture

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: **NUM** = numerical grade, **B/NB** = (not) successfully completed

Regulations: **(L)ASPO** = general academic and examination regulations (for teaching-degree programmes), **FSB** = subject-specific provisions, **SFB** = list of modules

Other: **A** = thesis, **LV** = course(s), **PL** = assessment(s), **TN** = participants, **VL** = prerequisite(s)

Conventions

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

Notes

Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should the module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

In accordance with

the general regulations governing the degree subject described in this module catalogue:

ASPO2015

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

13-Jan-2016 (2016-3)

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.

Compulsory Electives Mathematics

(40 ECTS credits)

Applied Mathematics

(ECTS credits)

Module title	Abbreviation
Applied Analysis	10-M=AAAN-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In-depth study of functional analysis and operator theory, Sobolev spaces and partial differential equations, theory of Hilbert spaces and Fourier analysis, spectral theory and quantum mechanics, numerical methods (in particular FEM methods), principles of functional analysis, function spaces, embedding theorems, compactness, theory of elliptic, parabolic and hyperbolic partial differential equations with methods from functional analysis.

Recommended previous knowledge:
Familiarity with the contents of the module "Functional Analysis" is strongly recommended.

Intended learning outcomes

The student is acquainted with the fundamental notions, methods and results of higher analysis. He/She is able to establish a connection between his/her acquired skills and other branches of mathematics and questions in physics and other natural and engineering sciences.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Physics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)

Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's degree (1 major) Physics (2020)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Numeric of Large Systems of Equations	10-M=ANGG-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Discretisation of elliptic differential equations, classical iteration methods, preconditioners, multigrid methods.

Recommended previous knowledge:
Basic knowledge of numerical mathematics, such as that acquired in the modules "Numerical Mathematics 1" and "Numerical Mathematics 2", is required. Knowledge of the contents of the module "Basics in Optimization" is also recommended.

Intended learning outcomes

The student is acquainted with the most important methods for solving large systems of equations, and knows the most efficient way to solve a given system of equations.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)

Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title			Abbreviation
Basics in Optimization			10-M=AOPT-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Fundamental methods and techniques in continuous optimization, unrestricted optimization, conditions for optimality, restricted optimization, examples and applications in natural and engineering sciences as well as economics.

Intended learning outcomes

The student knows the fundamental methods of continous optimization, can judge their strengths and weaknesses and can decide which method is the most suitable in applications.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)

Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Control Theory	10-M=ARTH-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Introduction to mathematical systems theory: stability, controllability and observability, state feedback and stability, basics in optimal control.

Recommended previous knowledge:
Basic knowledge of the contents of the module "Ordinary Differential Equations" is useful.

Intended learning outcomes

The student is acquainted with the fundamental notions and methods of control theory. He/She is able to establish a connection between these results and broader theories, and learns about the interactions of geometry and other fields of mathematics.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)

Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Bachelor's degree (1 major) Aerospace Computer Science (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)

Module title	Abbreviation
Numeric of Partial Differential Equations	10-M=VNPE-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Types of partial differential equations, qualitative properties, finite differences, finite elements, error estimates (numerical methods for elliptic, parabolic and hyperbolic partial differential equations; finite elements method, discontinuous Gelerkin finite elements method, finite differences and finite volume methods).

Recommended previous knowledge:
We recommend basic knowledge of functional analysis and partial differential equations, such as can be acquired in the modules "Introduction to Functional Analysis" and "Applied Analysis".

Intended learning outcomes

The student is acquainted with advanced methods for discretising partial differential equations.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Physics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)

Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's degree (1 major) Physics (2020)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Selected Topics in Optimization	10-M=VOPT-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Selected topics in optimization, e. g. inner point methods, semidefinite programs, non-smooth optimization, game theory, optimization with differential equations.

Intended learning outcomes

The student is acquainted with advanced methods in continuous optimization. He gains the ability to work on contemporary research questions in continuous optimization.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)

Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Discrete Mathematics	10-M=VDIM-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Advanced methods and results in a selected field of discrete mathematics (e. g. coding theory, cryptography, graph theory or combinatorics)

Recommended previous knowledge:
Basic knowledge of the contents of the module "Introduction to Discrete Mathematics" is required.

Intended learning outcomes

The student is acquainted with advanced results in a selected topic in discrete mathematics.

Courses (type, number of weekly contact hours, language — if other than German)

V (3) + Ü (1)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 15 minutes) or
c) oral examination in groups (groups of 2, approx. 10 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Physics (2016)
Master's degree (1 major) Nanostructure Technology (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Mathematics (2019)
Master's degree (1 major) Nanostructure Technology (2020)

Master's degree (1 major) Physics (2020)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Quantum Technology (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Dynamical Systems	10-M=VDSY-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Fundamentals of dynamical systems, e. g. stability theory, ergodic theory, Hamiltonian systems.

Recommended previous knowledge:
Basic knowledge of the contents of the module "Ordinary Differential Equations" is useful.

Intended learning outcomes

The student masters the mathematical methods in the theory of dynamic systems, and is able to analyse their quality.

Courses (type, number of weekly contact hours, language — if other than German)

V (3) + Ü (1)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 15 minutes) or
c) oral examination in groups (groups of 2, approx. 10 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)

Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Selected Topics in Control Theory	10-M=VTRT-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Selected topics in linear and non-linear control theory, e. g. networked linear control systems, controllability of bilinear systems.

Recommended previous knowledge:
Knowledge of the contents of the module "Mathematical Control Theory" or "Control Theory" is required.

Intended learning outcomes

The student gains insight into contemporary research problems in control theory. He/She masters advanced techniques in this field and can apply them to complex problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)

Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)

Module title	Abbreviation
Inverse Problems	10-M=VIPR-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Linear operator equations, ill-posed problems, regularisation theory, Tikhonov regularisation, iterative regularisation methods, examples of ill-posed problems.

Recommended previous knowledge:
Basic knowledge of functional analysis, such as that taught in the module "Functional Analysis", is recommended.

Intended learning outcomes

The student can judge whether a given problem is well posed or ill posed. He/She can apply regularisation methods and examine them regarding stability and convergence, and is familiar with selected inverse problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (3) + Ü (1)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 15 minutes) or
c) oral examination in groups (groups of 2, approx. 10 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)

Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)

Module title	Abbreviation
Non-linear Analysis	10-M=VNAN-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Methods in nonlinear analysis (e. g. topological methods, monotony and variational methods) with applications.

Recommended previous knowledge:
We recommend basic knowledge of functional analysis and partial differential equations, such as can be acquired in the modules "Introduction to Functional Analysis" and "Applied Analysis".

Intended learning outcomes

The student is acquainted with the concepts of non-linear analysis, can compare them and assess their applicability on practical problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (3) + Ü (1)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 15 minutes) or
c) oral examination in groups (groups of 2, approx. 10 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)

Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Optimal Control	10-M=VOST-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Basics in optimal control of ordinary and partial differential equations, theory of optimal control, conditions for optimality, methods for numerical solution.

Recommended previous knowledge:
We recommend basic knowledge of functional analysis and ordinary differential equations, such as can be acquired in the modules "Introduction to Functional Analysis" and "Ordinary Differential Equations". Knowledge of the contents of the module "Basics in Optimization" may also be useful.

Intended learning outcomes

The student is acquainted with advanced methods in optimal control. He gains the ability to work on contemporary research questions in continuous optimization.

Courses (type, number of weekly contact hours, language — if other than German)

V (3) + Ü (1)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 15 minutes) or
c) oral examination in groups (groups of 2, approx. 10 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)

Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title			Abbreviation
Learning by Teaching 1			10-M=ELT1-161-m01
Module coordinator		**Module offered by**	
Dean of Studies Mathematik (Mathematics)		Institute of Mathematics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Supervising a tutorial or study group in the Bachelor's programme under guidance of the respective lecturer.

Intended learning outcomes

The student gains his/her first experience in teaching university mathematics. He/She knows basic didactical methods and can apply them in practical situations.

Courses (type, number of weekly contact hours, language — if other than German)

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Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

Assessment of tutoring activities by supervising lecturers or exercise supervisors (1 to 2 teaching units)

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)

Module title			Abbreviation
Selected Topics in Business Mathematics			10-M=ATWM-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Contemporary topics in mathematics for economics, for example in the field of statistics, finance or insurance mathematics.

Recommended previous knowledge:
Depending on the content, basic and advanced knowledge from different areas of statistics or stochastics is required. In case of doubt, it is recommended to consult the lecturer.

Intended learning outcomes

The student is acquainted with fundamental concepts and methods in a contemporary field of mathematics for economics, and is able to apply these skills to complex questions.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Economathematics (2024)
Master's degree (1 major) Economathematics (2025)

Stochastics and Statistics

(10 ECTS credits)

Module title			Abbreviation
Industrial Statistics 1			10-M=AIST-161-m01
Module coordinator		**Module offered by**	
Dean of Studies Mathematik (Mathematics)		Institute of Mathematics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
10	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Theory of parameter and domain estimates, tests for statistical estimates, distribution models, empirical distribution analysis, comparative analysis, statistical product testing, survey sampling, audit sampling.

Intended learning outcomes

The student masters the fundamental statistical methods for industrial applications.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)

Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Stochastical Processes	10-M=ASTP-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Markov chains, queues, stochastic processes in C[0,1], Brownian motion, Donsker's theorem, projective limits.

Recommended previous knowledge:
Basic knowledge of stochastics is required, such as that acquired in the "Stochastics 1" module. Knowledge of the contents of the module "Stochastics 2" is also recommended.

Intended learning outcomes

The student is acquainted with the fundamental notions and methods of stochastical processes and can apply them to practical problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)

Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Time Series Analysis 1	10-M=AZRA-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Additive model, linear filters, autocorrelation, moving average, autoregressive processes, Box-Jenkins method.

Recommended previous knowledge:
Basic knowledge of stochastics is required, such as that acquired in the "Stochastics 1" module. Knowledge of the contents of the module "Stochastics 2" is also recommended.

Intended learning outcomes

The student is acquainted with the fundamental methods of time series analysis and can apply them to practical problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)

Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)

Module title			Abbreviation
Industrial Statistics 2			10-M=VIST-161-m01
Module coordinator		**Module offered by**	
Dean of Studies Mathematik (Mathematics)		Institute of Mathematics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
10	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Linear models, regression analysis, nonlinear regression, experimental design, basics in time series modelling, basics in empirical time series analysis, methods of exponential smoothing, predictions and prediction domains, statistical process monitoring.

Intended learning outcomes

The student masters advanced statistical methods for industrial applications.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)

Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Economathematics (2025)

Module title			Abbreviation
Statistical Analysis			10-M=VSTA-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Contingency tables, categorical regression, one-factorial variance analysis, two-factorial variance analysis, discriminant function analysis, cluster analysis, principal component analysis, factor analysis.

Recommended previous knowledge:
Basic knowledge of stochastics is required, such as that acquired in the "Stochastics 1" module. Knowledge of the contents of the module "Stochastics 2" is also recommended.

Intended learning outcomes

The student is acquainted with the fundamental methods in statistical analysis and can apply them to practical problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
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Master's degree (1 major) Computational Mathematics (2019)

Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)

Module title			Abbreviation
Time Series Analysis 2			10-M=VZRA-161-m01
Module coordinator		**Module offered by**	
Dean of Studies Mathematik (Mathematics)		Institute of Mathematics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
10	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

State-space models, Kalman filter, frequency spaces, Fourier analysis, periodograms, characterisation of autocovariance functions.

Intended learning outcomes

The student is acquainted with advanced methods in time series analysis. He gains the ability to work on contemporary research questions in this field.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)

Master's degree (1 major) Mathematical Physics (2020)

Financial and Insurance Mathematics

(10 ECTS credits)

Module title	Abbreviation
Stochastic Models of Risk Management	10-M=ASMR-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Measure theory, risk diagrams, failure mode and effects analysis, risk assessment in auditing, shortfall measures, value at risk, conditional value at risk, axiomatic of risk measures, modelling of interdependencies, copula, modelling of functional interrelations, regression models, basics in time series modelling, aggregated losses, estimates of shortfall measures, estimates of value at risk and conditional value at risk, basics in empirical time series analysis, methods of exponential smoothing, predictions and prediction domains, estimates of value at risk in time series, elementary empirical regression analysis, simulation methods.

Intended learning outcomes

The student is acquainted with the fundamental methods of stochastic risk analysis.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)

Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Insurance Mathematics 1	10-M=AVSM-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The module discusses policies on one life: distributions of future lifetime, life tables, life table approximations, types of benefits, present value, expection principle, premium calculation, commutation functions, reserves and policy values, expenses, bonus, recursive methods, Thiele's differential equation.

Recommended previous knowledge:
Depending on the content, basic and advanced knowledge from different areas of statistics or stochastics is required. In case of doubt, it is recommended to consult the lecturer.

Intended learning outcomes

The student is acquainted with the fundamental notions and methods of life insurance mathematics and can apply them to practical problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)

Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Selected Topics in Financial Mathematics	10-M=VFNM-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Selected topics in financial mathematics, e. g. conditional expectation and martingales, fundamental theorem of asset pricing in discrete time for finite spaces, American put, Snell envelope, stopping time, optimal stopping, stochastic integration, stochastic differential equations and Ito calculus, Black-Merton-Scholes model.

Recommended previous knowledge:
Familiarity with the contents of the modules "Introduction to Stochastic Financial Mathematics" and "Stochastics 1" is strongly recommended.

Intended learning outcomes

The student is acquainted with advanced results in financial mathematics. He/She gains the ability to work on contemporary research questions in financial mathematics and can apply his/her skills to complex problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)

Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Insurance Mathematics 2	10-M=VVSM-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module discusses modern valuation approaches and multiple decrement models regarding one life or two lives: modern valuation in life insurance mathematics, axiomatic derivation of the product measure approach, Markov chain models, Kolmogorov's differential equations, Thiele's differential equations, numerical applications, joint life policies.

Recommended previous knowledge:
Familiarity with the contents of the modules "Insurance Mathematics 1" and "Selected Topics in Financial Mathematics" is strongly recommended.

Intended learning outcomes

The student is acquainted with advanced methods in insurance mathematics. He gains the ability to work on contemporary research questions in insurance mathematics and can apply his/her skills to complex problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or
b) oral examination of one candidate each (approx. 20 minutes) or
c) oral examination in groups (groups of 2, 15 minutes per candidate)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)

Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Economathematics (2025)

Compulsory Electives Business Management and Economics

(40 ECTS credits)

Two focuses with 40 ECTS credits

Economic Policy

(20 ECTS credits)

Compulsory Core Electives

(20 ECTS credits)

Module title			Abbreviation
European Competition Policy			12-M-WPE-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Outline of syllabus:
1. Legal environment, competition laws
2. Market definition
   - Qualitative methods
   - Simple quantitative methods
   - Hypothetical monopoly test
3. Horizontal agreements and collusion: repeated games and factors affecting likelihood of collusion
4. Horizontal mergers and collusion
   - Economic theory
   - Efficiency effects
   - Coordinated effects
5. Vertical relations and contracts
   - Economic analysis of contracts
   - "More economic approach"
6. Abuse of dominant position
   - Classification of abusive conduct
   - Economic analysis of abusive conduct and theory of harm

The course will be taught in English.

Intended learning outcomes

After completion of the module students can use the advanced concepts introduced in the lecture of competition policy, including the legal framework, the trace models and methods for the study of competition policy issues, as well as understand the approach of European competition policy in high profile cases. When they are confronted with practical problems, they can refer to these cases, and the same logic to practical examples apply by draining the relevant economic theories that identify variables to be measured and methodologies for assessing, and based on that adequate conclusions for appropriate cases. They will sufficiently understand the subject in order to open up that build upon literature in journals and being able to think critically.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. There are no restrictions with regard to available places for students of the Master's degree programmes Business Management, International Economic Policy or Economics, Wirtschaftsinformatik (Business Information Systems), Wirtschaftsmathematik (Mathematics for Economics) and Chinese and Economics as well as China Business and Economics. A total of 20 places will be allocated to students of other subjects; should the number of applications exceed the number of available places, these places will be allocated by lot.

Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) Media Communication (2016) Master's degree (1 major) China Language and Economy (2016) Master's degree (1 major) Applied Human Geography (2017) Master's degree (1 major) Media Communication (2018) Master's degree (1 major) Media Communication (2019)

Module title	Abbreviation
Theory of Social Policy	12-M-TSP-161-m01

Module coordinator	Module offered by
holder of the Chair of Labour Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This course offers an introduction to the fundamentals of causal inference and to widely used research designs in the social sciences. In the first part a framework for understanding causality is introduced. Specifically, the epistemological differences between association, intervention and counterfactuals are explained. Then it is shown why experiments are paramount in generating causal knowledge and which assumptions are needed for which level of the causal hierarchy. Finally, we will discuss two widely used approaches to causality in the social sciences, i.e. potential outcomes and directed acyclic graphs.

The second part is devoted to the research designs regressions analysis, difference-in-differences, instrumental variables, and regression discontinuity. The emphasis is how these research designs are for example applied to answer important questions in labour economics such as the effects of a minimum wage increase on employment or the effect of children on female labour supply and wages.

The assumptions each research design requires in order to identify a causal effect will be at center stage of the lecture. Therefore the emphasis is to teach students *what* one needs to estimate in order to answer a given question. Further, the research designs are discussed such that students will be able to evaluate and apply these research designs to other questions and fields.

Intended learning outcomes

At the end of the course, students should be able to understand basic concepts and methods of causal inference, as well as read, interpret, and assess the credibility of scientific publications. In addition, the course serves as preparation for advanced statistics and econometrics courses.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Labor Market Economics	12-M-OEA-161-m01

Module coordinator	Module offered by
holder of the Junior Professorship of Microeconomics, esp. Economics of Digitization	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This course provides an overview of the field of modern labor economics. The course will cover the following topics:
1. Labor supply
2. Labor demand
3. Human capital formation
4. Compensating wage differentials
5. Discrimination

The course will consist of frontal teaching of the basic theoretical as well as empirical tools as well as a careful reading of some of the key scientific articles related to the outlined topics. Students are expected to read the scientific articles in advance and will be asked to discuss them in small groups during class. In addition, a discussion of the articles will help illustrating how established scholars approach the core questions in modern labor economics and giving students an understanding of high quality empirical research.

The main reference for the lecture is Cahuc and Zylberberg. (2004): "Labor Economics", 1st edition, Massachusetts Institute of Technology. In addition, we will discuss well-published economic articles related to the single topics discussed in class.

Intended learning outcomes

The aim of this course is to acquaint students with classical as well as modern topics in labor economics and to encourage the development of research interest in this field. As such, the course's objective is to familiarize students with both the core theoretical models of labor economics as well as the main econometric methods used to provide empirical evidence.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Module title	Abbreviation
Public Debt	12-M-F2-161-m01

Module coordinator	Module offered by
holder of the Chair of Public Finance	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
The module provides an introduction to some specific issues of public debt that are in the focus of the public and scientific debate.
Reading: lecture notes provided by Chair.

Outline of syllabus:
1. Measurement of public debt
2. Growth effects of public debt
3. Intergenerational effects of public debt
4. Public debt in open economies
5. Neutrality of public debt
6. Political economy of public debt
7. Theory of souvereign debtors

Intended learning outcomes

After completing the course "National Debt" students are able to distinguish and discuss the most important measurement concepts and problems of public debt. They can discuss the growth and distributional consequences using simple equilibrium models of closed and open economies. They can evaluate the relevance of Ricardian neutrality and know the political economny explanations of rising debt levels and debt overhangs in specific countries.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)

Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Social Insurance and the Welfare State			12-M-F3-161-m01

Module coordinator	Module offered by
holder of the Chair of Public Finance	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
This module discusses the economic justification for implementing social security systems in a market economy and provides students with deeper insights into this topic with the help of specific issues of public health and retirement policy.
Reading: lecture notes provided by Chair.

Contents:
1. Public intervention in insurance markets
2. The insurance function of social security
3. Social security and social morale
4. The optimal health insurance contract
5. Why do we need a public pension system?
6. Funding vs pay-as-you-go financing of public pensions

Intended learning outcomes

After completing the module "Theorie der Sozialversicherung" students are able to explain the theoretical foundation of the social security system in a market economy. Using simple partial equilibrium models they can discuss the financing and contract structure of the public health and pension system. Finally they are able to analyze the consequences of policy reforms.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Monetary Policy and the Financial System			12-M-EG1-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Monetary Economics and International Financial Markets		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module is a thorough introduction to monetary policy. The course is divided into four sections. The first one repeats macroeconomic concepts. The second one deals with core topics on monetary policy and theory. In the third one, monetary policy with the zero lower bound on nominal interest rates constraint is analyzed. The fourth section deals with linkages between monetary and fiscal policy.

Format of the module: lectures and exercise sessions

Prerequisites: Basic knowledge of microeconomics and macroeconomics as taught in Bachelor programs in Economics, Business or similar fields.

Usability: Master International Economic Policy

Requirements for getting credit points according to the Eropean Credit Transfer System (ECTS): Passing the final exam.

ECTS and grading: 5 ECTS, Grading on a scale from 1-5 based on the final exam.

Frequency of the module: Each winter term

Workload: 150 hours (Lecture + Exercise Session + Self Study)

Duration: 1 Semester

Intended learning outcomes

Students will acquire a thorough understanding of the theory and practice of monetary policy. Students gain expertise on institutional aspects and theoretical monetary models. Having completed the module, students will be able to understand current developments in monetary policy and and apply models and theories to analyze and evaluate these.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

30 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload
150 h
Teaching cycle
Teaching cycle: after announcement
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) Media Communication (2016) Master's degree (1 major) China Language and Economy (2016) Master's degree (1 major) Media Communication (2018) Master's degree (1 major) Media Communication (2019)

Module title			Abbreviation
Monetary Policy, Foreign Exchange Markets, and the International Monetary System			12-M-EG2-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Monetary Economics and International Financial Markets		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course deals with the following topics:

The foreign exchange market:
Functioning of foreign exchange markets; market structure, players and evolution; FX transactions; hedging and speculation with FX.

Exchange rate economics:
Theoretical background and empirical validity of covered interest parity (CIP), uncovered interest rate parity (UIP) and purchasing power parity (PPP); Monetary approach: Flexible price monetary model and sticky price (Dornbusch-) overshooting model; Balassa-Samuelson effect; FX valuation via the PPP and the macroeconomic balance approach; Real effective exchange rates; Empirical validity of the exchange rate theories; Exchange rates and the current account.

Exchange rate regimes and monetary policy in open economies:
Classification of exchange rate regimes; the policy trilemma in open economies; historical development of the international monetary system; central bank interventions on the FX market.

Modelling open economy macroeconomics at the intermediate level:
Implications of the Mundell-Fleming model for monetary and fiscal policy under fixed and flexible exchange rates.
The BMW (IS-MP-PC) model of the open economy and its implication for monetary and fiscal policy under fixed and flexible exchange rates; optimum currency areas in the BMW model and in practice.

Currency crises:
International experience with currency crises since the 1970s; modelling currency crises within the Mundell-Fleming framework.

Managed-floating as a solution for the policy trilemma.

Intended learning outcomes

By completing this course, students receive a profound understanding of the functioning of foreign exchange markets, the drivers of exchange rate movements and some exchange rate valuation methods used in practice. Next to a profound knowledge of exchange rate theory the course highlights its practical applicability, e.g. as an investment strategy. In the second part of the course students learn the principles of monetary policy in open economies, including its trade-offs and risks like currency crises. Students will be able to analyze these issues based on theoretical models as well as the international historical experience.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)

Language of assessment: German and/or English

Allocation of places

30 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Module title			Abbreviation
Empirical Regional- and International Economic Research			12-M-ERA-161-m01
Module coordinator			**Module offered by**
Dean of the Faculty of Business Management and Economics			Faculty of Management and Economics
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

No information on contents available.

Intended learning outcomes

No information on intended learning outcomes available.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 10 pages) on empirical analysis prepared by candidates or
c) portfolio (approx. 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Trade Policy and the World Trading System			12-M-TP-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of International Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

The module starts out with a sketch of key facts and the evolution of the world trading system as well as current trade policy controversies. The main part of the lecture deals with trade policy instruments (e.g. tariffs and quotas) and arguments in favor of trade policy interventions (the terms of trade, strategic trade policy, infant industries, industrial policy, environmental policy). Political economy issues are also addressed.

Outline

1 The evolution of the world trading system and current issues

2 Trade policy instruments and their effects under perfect competition

3 The competition effect of trade opening

4 Domestic distortions

5 International market power and trade policy

6 Political economy and the world trading system

Literatur:

The main text used is:

Helpman, E. und P.R. Krugman (1989). Trade Policy and Market Structure. The MIT Press, Cambridge, Massachusetts.

The following monographs cover the evolution of the world trading system and the evolution of ideas in trade policy making:

Bhagwati, J. (2002). Free Trade Today, Princeton University Press

Bhagwati, J. (2005). In Defense of Globalization. Oxford University Press

Irwin, D. (2020). Free Trade Under Fire, Princeton University Press, 5th Edition (as well as former editions partially containing further material)

Irwin, D. (1996). Against the Tide. An Intellectual History of Free Trade, Princeton University Press

Basic refreshers are

Krugman, P.R., M. Obstfeld und M. Melitz (2018), International Economics. Theory and Policy. Addison-Wesley, 11th Edition

Caves, R., R.W. Jones und J.A. Frankel (2007), World Trade and Payments. An Introduction. Addison-Wesley, 10th Edition

This literature is complemented by papers from scholarly journals.

Intended learning outcomes

Students acquire the ability to critically understand the effects and issues associated with the use of trade policy instruments. They are enabled to understand and evaluate the causes and consequences of interventions in international trade on the aggregate economy, producers and consumers, the foreign trading partners and the world trading system both analytically as well as in an intuitive manner. Students also acquire the scientific knowledge to grasp the factors determining the structure and dynamics of the world trading order.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Strategic Marketing Management

(20 ECTS credits)

Compulsory

(10 ECTS credits)

Module title			Abbreviation
International Marketing			12-M-IMM-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Administration and Marketing	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
The module builds on the knowledge acquired during the Bachelor's degree programme or the *Grundstudium* (stage I studies). It provides a systematic introduction to strategic marketing decisions in global and international contexts. These are explained mainly by Porter's diamond and cluster models. Another focus is on internationalisation strategies, which require country analyses and decisions on the selection of national markets as well as a timing of the countries market development. In addition, the module discusses different strategies for market entry and market development.

Outline of syllabus:
1. Internationalisation of the economy and regional integration processes
   - Globalisation
   - Competitiveness of countries, industries and companies in an international context
2. International strategic marketing decisions
   - Market entry forms
   - Market development strategies
   - Timing strategies
   - International organisation structures
3. Theories and strategies of internationalisation
   - Foreign trade theory
   - Multinational enterprise
   - Internationalisation strategies

Reading:
Meffert, H. / Burmann C. / Becker, C.: Internationales Marketing-Management, Stuttgart etc. (most recent edition).
Berndt, R. / Fantapié-Altobelli C. / Sander M.: Internationales Marketing-Management, Berlin etc. (most recent edition).

Intended learning outcomes

Students acquire in-depth skills in the field of strategic and operational management with particular attention to the international context. Students achieve particular expertise in the analysis, assessment and implementation of international business decisions and gain skills thus guiding the execution of marketing and management positions in globally-active companies.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: after announcement
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016) Master's degree (1 major) Management (2018) Master's degree (1 major) International Economic Policy (2018) Master's degree (1 major) China Business and Economics (2019) Master's degree (1 major) China Language and Economy (2019) Master's degree (1 major) Information Systems (2019) Master's degree (1 major) China Business and Economics (2021) Master's degree (1 major) China Language and Economy (2021) Master's degree (1 major) Economathematics (2021) Master's degree (1 major) Information Systems (2022) Master's degree (1 major) International Economic Policy (2022) Master's degree (1 major) Management (2022) Master's degree (1 major) Economathematics (2022) exchange program Business Management and Economics (2022)

Module title			Abbreviation
Strategic Marketing			12-M-SM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Business Administration and Marketing		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
The module raises awareness in students of the relevance and necessity of strategic management in a competitive and dynamical competitive process.

Content:
Based on the marketing strategies as well as the stakeholder and entrepreneurship approaches, this module discusses the roots of the concept of strategy in marketing based on Drucker, Porter, Ansoff and Mintzberg. The focus of the module is on thinking in competitive advantages, which is directly related to responsible leadership.

Outline of syllabus:
1. Competitive dynamics requires strategy and leadership
2. Marketing strategies, stakeholder management and entrepreneurship
3. Objectives and tasks of corporate governance in management practice
4. Competitive forces, strategies and benefits according to Michael Porter
5. Growth strategies and marketing myths
6. Future technologies, new businesses and dynamic capabilities
7. Nature and principles of responsible management

Reading:
Barnard, CI (1938): The Functions of the Executive, Harvard University Press, Cambridge, Massachusetts.
Eschenbach, R.; Eschenbach, S.; Kunesch, H. (2008): Strategische Konzepte: Management-Ansätze von Ansoff bis Ulrich, 5th ed., Schäffer-Poeschel Stuttgart.
Freeman, RE (2010): Strategic Management: A Stakeholder Approach, Cambridge University Press.
Grant, R. M.; Nippa, M. (2006): Strategisches Management: Analyse, Entwicklung und Implementierung von Unternehmensstrategien, 5th ed., Pearson Munich.
Hinterhuber, H. H. (2011): Strategische Unternehmensführung -- I. Strategisches Denken, 8th ed., Erich Schmidt Verlag, Berlin.
Hungenberg, H. (2012): Strategisches Management in Unternehmen: Ziele -- Prozesse -- Verfahren, 7th ed., Gabler, Wiesbaden.
Johnson, G.; Scholes, K.; Whittington, R. (2009): Fundamentals of Strategy, 1st ed., Financial Times and Prentice Hall Harlow.
Kotler, P.; Berger, R.; Bickhoff, N. (2010): The Quintessence of Strategic Management, Springer, Heidelberg.
Laasch, O.; Conaway RN (2014): The Principles of Responsible Management: Global Sustainability, Responsibility, and Ethics, Cengage Stamford.
Meffert, H.; Burmannn, C.; Kirchgeorg, M. (2012): Marketing -- Grundlagen marktorientierter Unternehmensführung, 11th ed., Gabler, Wiesbaden.
Meyer, M. (1995): Ökonomische Organisation der Industrie: Netzwerkarrangements zwischen Markt und Unternehmung, Gabler, Wiesbaden.
Müller-Stewens, G.; Lechner, C. (2011): Strategisches Management -- Wie strategische Initiativen zum Wandel führen, 4th ed., Schäffer-Poeschel Stuttgart.
Porter, M. (1999): Wettbewerb und Strategie, Econ Munich. (Original: Porter, M.: On Competition, Boston, 1998.)
Porter, M. (2014): Wettbewerbsvorteile -- Spitzenleistungen erreichen und behaupten, 8th ed., Campus Frankfurt / New York. (Original: Porter, M.: Competitive Advantage, New York, 1985)

Porter, M. (2013): Wettbewerbsstrategie -- Methoden zur Analyse von Branchen und Konkurrenten, 12th ed., Campus, Frankfurt / New York. (Original: Porter, M.: Competitive Strategy, New York, 1980)
Welge, M. K.; Al-Laham, A. (2012): Strategisches Management: Grundlagen -- Prozesse -- Implementierung, 6th ed., Springer Wiesbaden.

Intended learning outcomes

The students have a deeper understanding of the sustainable corporate management and have the basics of the competitive process and competitive dynamics available. In addition, they can use the acquired knowledge, while taking into account the conventional problems of the strategic and sustainable management, to solve business case studys on their own.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Information Systems (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Compulsory Core Electives

(10 ECTS credits)

Module title			Abbreviation
Strategic Networks in Industry			12-M-MS-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The primary object of this course is to gain a detailed understanding of strategic networks and of the phenomenon of clustering in the industrial industry. The example of the international automotive industry is used for clarification of the theoretical contents.
The focus is on marketing in industrial companies and also on CSR - CSR is considered the "driver" of sustainable innovations - as well as the different strategy types of sustainable innovations.
Outline of syllabus:
1. Strategic networks and clusters in industrial industries such as the automotive industry
2. Transaction types of Williamson as well as strategic cooperation between automobile manufacturers and suppliers
3. Management of business types, in particular the business of suppliers in the automotive industry
4. Cluster and entrepreneurship activities
5. Sustainable innovation strategies

Intended learning outcomes

By the end of the course, students gain a profound understanding above the basics of network research. Furthermore students will aquire sectoral knowledge of the automotive industry as well as detailed cluster skills.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)

Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)

Module title	Abbreviation
Brand Management & Market Research	12-M-MM-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
At the beginning of the 21st century, marketing - until then interpreted as a market-oriented corporate management approach - was further developed to be seen as the entrepreneurial task of creating "shared value" for the organisation on the one hand and - broadly speaking - for society on the other hand. This idea leads to high requirements regarding the strategic sustainable positioning of the brand as well as brand management itself.

Outline of syllabus:
1. Brand leadership and brand assessment
2. Brand leadership, identity and relevance according to David Aaker's approach
3. Brand strategies
4. Consumer behaviour
5. Market research methods and the development of brand strategies
6. Market research methods

Intended learning outcomes

Based on the theories of Meffert and Aaker, students will gain a profound understanding for brand leadership, which will be deepened by many pracital implications and examples. Provided by cases studies and market research tools, it's the defined goal of this lecture to convey an in-depth knowledge for consumer behavior and sustainable brand management.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)

Module title	Abbreviation
Industrial Management 1	12-M-SBM-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Industrial Management	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course addresses central issues of strategic supply management. The supply function of the company (purchasing, materials management, procurement logistics) and its strategic importance is analysed and basic methods are developed that are relevant in this area.

Intended learning outcomes

Students learn the principles of performance-oriented optimization of all procurement activities to develop long-term, competitively sensitive potential for success. After completion of the module students are able to prepare structured, to goal-oriented analyze and to respond to performance-oriented issues of strategic procurement based on key instruments. Students are able to accurately classify the tasks of the procurement and to describe and discuss their strategic importance and dominate essential methods and procedures used in this area to apply.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively eLearning, S, WS

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 40 to 60 minutes) or
b) presentation (approx. 20 minutes) and term paper (approx. 15 to 20 pages); (weighted 1:1) or
c) term paper (approx. 30 to 40 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)

Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Strategic Managerial Accounting	12-M-INST-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management, Controlling and Accounting	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The module focuses on accounting instruments, which are applied in the context of strategic management of enterprises. First, it addresses important drivers of strategic decisions from a microeconomic perspective, such as the emergence of cost and quality advantages in competition as well as scale and experience curve effects. Second, the module covers analytical and heuristic techniques of planning and control. In the context of these techniques, instruments of target costing, life cycle cost analysis, benchmarking and business wargaming are discussed with regard to their theoretical foundation and fields of application.

Intended learning outcomes

Initially, knowledge about fundamental requirements concerning instruments of decision-making and behavior control within enterprises is acquired. What is more, the module conveys obtaining knowledge about the strengths and weaknesses and therewith fields of application and limits of prevalent instruments of strategic corporate management used by practitioners.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Coordination, Budgeting and Incentives in Companies			12-M-KOBO-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Business Management, Controlling and Accounting		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module focuses on accounting-based instruments to control behavior in decentralized enterprises. The course first discusses the role of accounting in the context of decision-making and behavioral controlling as well as informational analyses. Afterwards, the most common instruments of behavioral controlling (budgeting, value-oriented management, transfer prices) are discussed with regard to theory and practice.

Intended learning outcomes

This module aims to provide knowledge in the context of behavioral control in enterprises. Knowledge about requirements on instruments used for behavioral control are discussed and competences for deployment, structure and development of coordination tools are provided.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Business Software 1: IS-based Enterprise Management			12-GPU-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The module offers a comprehensive insight into the world of Enterprise Resource Planning (ERP) systems. ERP systems are central building blocks in modern business management and play a crucial role in the integration of business processes, data management and decision-making. This module is divided into three sections, each of which focuses on practical applications and examples in addition to theory.

Section 1: ERP selection process with application examples of two ERP systems
The first part of the module is dedicated to the complex process of selecting a suitable ERP system for a company. Students are familiarized with proven methods and tools that are used in the evaluation of ERP systems. Using case studies, students compare two different ERP systems and apply the selection process in a real-life environment.

Section 2: Low-code and no-code systems with application examples
In this part, students are familiarized with low-code and no-code platforms that enable the efficient development of individual ERP applications. The focus is on dealing with a specific software solution from a leading company in this field. Students learn the basics of these platforms and create their own applications in order to experience the advantages of low-code and no-code approaches in practice.

Section 3: Customizing ERP software using the example of SAP S/4HANA
In the final part, students learn the basics of customizing ERP software. The focus is on the world's leading ERP system SAP S/4HANA. Students are enabled to adapt SAP S/4HANA to the specific requirements of a company. Practical exercises and case studies enable students to apply customizing techniques in real-life scenarios.

In addition to the theoretical information presented in the lecture, the exercises offer the opportunity to access the ERP systems and deal with the respective software in a practical way by means of extensive case studies.

Intended learning outcomes

The "Business Software 1: Management and Implementation of Information Systems" module aims to achieve the following learning outcomes:
1. ERP Systems - Overview and Differentiation: Students gain a comprehensive understanding of various ERP systems, their architectures, and philosophies.
2. Integration of Business Processes: Participants learn how ERP systems map and optimize business operations.
3. Selection and Customizing of ERP Systems: Students develop skills to evaluate, select, and adapt ERP systems to meet business needs.
4. Implementation of Business Processes: Students gain practical experience in independently implementing business processes in ERP and low-code/no-code platforms, and learn practical ERP customizing.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or

b) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: Once a year, winter semester
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Management and Leadership in Organizations			12-MFO-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Part I:
The complexity of the modern work environment and the constantly changing organisational structures of companies lead to a demand for young mangers with a high diversity of expertise that are able to play their part in managing the organisational world. The lecture will provide students with an insight into the characteristics, tasks and instruments as well as the challenges of management in organisations and situations that are becoming ever more complex.

Outline of syllabus:
- Introduction -- Power in the daily management routine
- Fundamentals of management in complex organisations
- Tasks and instruments of management
- Leadership in an intercultural context
- Assurance of employability
- Conclusion -- Management of supervisors and colleagues

Part II: Today's world of work is characterised by continuous change in a global context. Mergers, integrations and acquisitions - these are key terms in this context.
The majority of change processes does not have the desired effect or even fails. This is not least due to the fact that not enough attention is paid to the complexity of these processes and to employees.
The support and integration of successful change processes is a central responsibility of managers as well as a complex and central task that requires sound preparation.

Outline of syllabus:
- Introduction - typical change scenarios
- Psychological basics and concepts
- Approaches and control in change projects
- Measures and instruments of change management
- The role of management
- Conclusion - example of application acquisitions and cases

Intended learning outcomes

Part I: Course objectives:
- Provide a widespread insight into the current status of theory and practice regarding management in complex organizations
- Introduction of essential tasks and instruments of managers and their apply to authentic cases.
- To illustrate and reflect the tensions of management in complex situations and international context

Part II: Course objectives:
- Provide a widespread insight into the current status of theory and practice regarding changes
- Introduction, suitability of daily use and critical reflection of essential concepts, models and methods
- Foster the understanding for the necessity, complexity of changes as well as their constraints and barriers.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)
written examination (approx. 60 minutes) Language of assessment: German and/or English creditable for bonus
Allocation of places
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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: no courses offered
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
E-Business Strategies			12-M-IBS-161-m01

Module coordinator	Module offered by
holder of the Chair of Information Systems Engineering	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The module provides an overview of strategic implications of digital technologies at the level of organisations, industries and value networks. To this end, concepts and frameworks from strategic technology management are applied to digital innovations and illustrated with numerous examples. In the accompanying exercise, case studies of well-known digital companies and their business models are analysed and discussed.

Intended learning outcomes

- Understand theoretical concepts of strategy development and implementation in the context of digital technologies.

- Apply different frames of reference and understand their strengths and weaknesses in the context of practical application.

- Transfer the concepts to real business situations

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places. Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
International Trade and the Multinational Firm			12-M-ITMF-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of International Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

The lecture starts out with theories of international trade based on comparative advantage (Ricardo and Heckscher-Ohlin) followed by theories based on monopolistic and oligopolistic competition to explain intra-industry trade. The final part covers firm heterogeneity and multinational firms. [If time permits the Armington model and the standard neoclassical model will be addressed.]

Outline

I Ricardian Trade Theory

II Heckscher-Ohlin Trade Theory

III New Trade Theory: Intra-Industry Trade, Increasing Returns to Scale, Imperfect Competition

IV Firm Heterogeneity, Trade and FDI

V The Multinational Firm

Literature:

The module draws heavily on articles from scholarly journals and handbooks. A detailed list of references with further references, notably journal articles, is provided with each chapter of the lecture. Material from the following books is also used:

Helpman, E. (2011). Understanding Global Trade. Princeton University Press.

Feenstra, R.C. (2016). Advanced International Trade. Theory and Evidence. Princeton University Press, Second Edition

Caves, R., R.W. Jones and J.A. Frankel (2007). World Trade and Payments. Addison Wesley

Bhagwati, J., A. Panagariya and T. N. Srinivasan (1998). Lectures on International Trade. Second Edition. MIT Press

Gandolfo, G. (1998). International Trade Theory and Policy. Springer-Verlag, Berlin and New York

Markusen, J.R., J.R. Melvin, W.H. Kaempfer, K. E. Maskus (1995). International Trade. McGrawHill

Barba Navaretti, G. and A.J. Venables (2004). Multinational Firms in the World Economy. Princeton University Press

Intended learning outcomes

The students acquire the ability to critically understand the causes and drivers of world trade and the developments of specialization patterns in the global economy. They learn to analyze, discuss and defend these developments and to apply the tools and methods to evaluate controversies associated with the ongoing deepening

of the international division of labor, in particular the repercussions of the global economy on national economies.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Industrial Management

(20 ECTS credits)

Compulsory

(15 ECTS credits)

Module title			Abbreviation
Industrial Management 1			12-M-SBM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Business Management and Industrial Management		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course addresses central issues of strategic supply management. The supply function of the company (purchasing, materials management, procurement logistics) and its strategic importance is analysed and basic methods are developed that are relevant in this area.

Intended learning outcomes

Students learn the principles of performance-oriented optimization of all procurement activities to develop long-term, competitively sensitive potential for success. After completion of the module students are able to prepare structured, to goal-oriented analyze and to respond to performance-oriented issues of strategic procurement based on key instruments. Students are able to accurately classify the tasks of the procurement and to describe and discuss their strategic importance and dominate essential methods and procedures used in this area to apply.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively eLearning, S, WS

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 40 to 60 minutes) or
b) presentation (approx. 20 minutes) and term paper (approx. 15 to 20 pages); (weighted 1:1) or
c) term paper (approx. 30 to 40 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)

Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Industrial Management 2	12-M-LA-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Industrial Management	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module analyses and classifies approaches of production planning and control. In addition, it develops methods and models of lot sizing and scheduling. The focus is on the determination of optimal production and transport volumes as well as the planning of orders and manufacturing orders.

Intended learning outcomes

Students learn essential concepts, principles and methods of production planning and control with emphasis on the determination of optimal production and transport volumes as well as the planning of production and order sequences. Then, based on this expertise related knowledge broadening and deepening, essential competencies are conveyed, which allow the imaging of realistic situations and problems using mathematical and quantitative models for the derivation and assessment of alternative courses of action. After completion of the module students can answer, analyze and structure questions of production planning and control, goal-oriented. They can also arrange the planning areas in the overall business context and have an in-depth overview of the production planning and control.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively eLearning, S, WS

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 40 to 60 minutes) or
b) presentation (approx. 20 minutes) and written elaboration (approx. 15 to 20 pages); weighted 1:1 or
c) term paper (approx. 30 to 40 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)

Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Industrial Management 3	12-M-SPM-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Industrial Management	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module will discuss contents and procedures of strategic production management and, in particular, planning and control concepts.
Students will become familiar with the essentials of strategic production management. Theoretical and analytical models will be used for analysing both economic and ecological issues. In addition, the module will discuss principles of value structure optimisation and will develop competences regarding the development of integrated mathematical models.

Intended learning outcomes

After completion of the module students are able to process, to analyze and answer questions of operations strategy structured and goal-oriented in a global context using appropriate methods. Furthermore, they know the main strategic tasks and objectives in production management and evaluate and apply planning and control concepts for the production in realistic application situations.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively eLearning, S, WS

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 40 to 60 minutes) or
b) presentation (approx. 20 minutes) and term paper (approx. 15 to 20 pages); (weighted 1:1) or
c) term paper (approx. 30 to 40 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Compulsory Core Electives

(5 ECTS credits)

Module title			Abbreviation
Industrial Management 4			12-M-BE-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Industrial Management	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This course will develop the objectives, principles and structure of electronically supported procurement processes with a special focus on catalogue-based procurement systems, electronic tendering systems, electronic (reverse) auctions, e-marketplaces, supplier relationship management systems and eSupply chain management systems.

Intended learning outcomes

The students will be able to describe and evaluate both the potentials and goals of electronic supported procurement systens and will be able to design appropriate systems for real-life applications. Students will get insight into the essentials of operational procurement management, especially e-procurement with a focus on catalog-based procurement systems, electronic tendering systems, electronic (reverse) auctions, e-marketplaces, supplier relationship management systems and eSupply chain management systems. After completing this module, students can define and analyze the related tasks and processes and show or develop theory-based and application-oriented possible solutions at a high professional level.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively eLearning, S, WS

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 40 to 60 minutes) or
b) presentation (approx. 20 minutes) and term paper (approx. 15 to 20 pages); (weighted 1:1) or
c) term paper (approx. 30 to 40 pages) or
d) entirely or partly computerised written examination (approx. 60 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. Should the number of applications exceed the number of available places, 15 places will be set aside for students of the Master's degree programmes Business Management and International Economic Policy or Economics and 5 places will be set aside for students of the Master's degree programme Wirtschaftsinformatik (Business Information Systems).

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Advanced Operations & Logistics Management			12-M-AOLM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Logistics and Quantitative Methods		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course "Advanced Operations & Logistics Management" acquaints students with advanced methods for the planning of integrated production and logistics systems and demonstrates the application of these with the help of multiple case studies

Intended learning outcomes

After completing this course students can
(i) analyze and evaluate integrated production and logistics systems;
(ii) develop and apply appropriate methods to plan complex production and logistics systems;
(iii) evaluate the consequences of uncertainties in processes, and
(iv) apply concepts and methods to plan uncertainties processes.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Global Logistics & Supply Chain Management			12-M-GLSC-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Logistics and Quantitative Methods		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course "Global Logistics & Supply Chain Management" acquaints students with advanced methods for the planning of global production networks and demonstrates the application of these with the help of multiple case studies.

Intended learning outcomes

After completing this course students can
(i) analyze and evaluate global production networks;
(ii) develop and apply appropriate methods to plan production networks;
(iii) evaluate the consequences of uncertainties in processes and apply concepts and methods to plan uncertain processes.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Managerial Analytics & Decision Making	12-M-MADM-161-m01

Module coordinator	Module offered by
holder of the Chair of Logistics and Quantitative Methods	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course "Managerial Analytics & Decision Making" discusses quantitative methods to structure and solve a diverse set of management problems and demonstrates the application of modern methods with the help of multiple case studies.

Intended learning outcomes

After completing this course students can
(i) better understand and structure problems;
(ii) apply important theoretical and empirical frameworks to practical problems that evaluate good and bad decision making;
(iii) implement advanced analytical methods to support decision making under risk.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Theory of Industrial Organization 1	12-M-TI1-161-m01

Module coordinator	Module offered by
holder of the Chair of Industrial Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Theory of industrial organisation:
1. Monopoly pricing
   - Nonlinear pricing and mechanism design
   - Dynamic pricing: experience goods, durable goods
2. Oligopoly pricing
   - Static price and quantity competition in homogeneous and differentiated goods markets
   - Comparative statics
   - Equilibrium market structure
3. Dynamic competition in oligopoly markets
   - Subgame perfect equilibrium and models of dynamic competition
   - Repeated games and collusion
4. Strategic behaviour by incumbent firms
   - Entry deterrence and predation
   - Signalling and reputation
5. Behavioral Industrial Organization
   - Reference Dependent Preferences and Framing Effects
   - Time inconsistent behavior

The course will be taught in English.

Intended learning outcomes

Students which complete this class will acquire a working knowledge of advanced theoretical models of competition in oligopoly markets as well as sophisticated pricing techniques in monopoly markets. They will learn the conditions under which the predictions of these models are valid. They will become familiar with applications of advanced game theoretic tools, such as dynamic models of competition, for studying interactions between firms in markets. By means of comprehensive exercises, they will apply the methods they learn in class to practically relevant problems. They will be in a position to read academic papers on related topics, assess the strengths and weaknesses of an approach, summarize and comment on these papers and suggest possible extensions.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload
150 h
Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Theory of Industrial Organization 2			12-M-TI2-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This course discusses vertical contracts in supply chains and their impact on competition.

Outline of syllabus:
1. The classic problem of double marginalisation and its solution by nonstandard contracts (resale price maintenance, nonlinear pricing (rebates), exclusive territories, exclusive dealing etc.)
2. Contracts for service
3. Common agency
4. The delegation principle
5. The commitment problem
6. Interlocking relationships
7. Foreclosure by vertical contracts or mergers

Intended learning outcomes

After completing the course students are able to
(i) explain the results of theoretical industrial economics on vertical contracts;
(ii) apply the involved methods to given simple examples on their own;
(iii) recognize, in which real life situations (and how) the results can be applied;
(iv) analyze the impact of certain vertical contracts on competition.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: In the semester in which the course is offered
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Project Management and Control			12-M-PROM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Business Management, Controlling and Accounting		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The module focuses on the discussion and critical examination of instruments and methods used in the context of project management and control within enterprises. Both classic and agile approaches to project management are considered. It covers characteristic features and structures of projects, their possible success factors, methods and instruments of control and management of projects in various project phases. The theoretical basis as well as potential applications of these instruments are discussed.

Intended learning outcomes

Initially, knowledge about fundamental requirements concerning instruments of project management and control is acquired. What is more, the module conveys knowledge about strengths and weaknesses and therewith fields of application and limits of commonly used instruments and methods of practitioners. Competences within the configuration and development of the project management and control as well as skills within the practical use are obtained..

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Decision Support Systems	12-M-DSS-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Analytics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course discusses advanced approaches for modelling and solving decision problems in business settings. The acquired insights are used to design and implement decision support systems using standard software tools (Python).

Intended learning outcomes

After successfully completing the course, students should be able to

- Understand the structure of classic business decision problems
- Isolate key elements from general problem descriptions and convert them to quantitative decision models
- Solve different classes of optimization problems (linear, network, integer, multi-objective, non-linear, stochastic)
- Implement decision support systems

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places.
Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)

Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
E-Business Strategies			12-M-IBS-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Information Systems Engineering		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The module provides an overview of strategic implications of digital technologies at the level of organisations, industries and value networks. To this end, concepts and frameworks from strategic technology management are applied to digital innovations and illustrated with numerous examples. In the accompanying exercise, case studies of well-known digital companies and their business models are analysed and discussed.

Intended learning outcomes

- Understand theoretical concepts of strategy development and implementation in the context of digital technologies.

- Apply different frames of reference and understand their strengths and weaknesses in the context of practical application.

- Transfer the concepts to real business situations

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places. Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Business Software 1: IS-based Enterprise Management			12-GPU-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The module offers a comprehensive insight into the world of Enterprise Resource Planning (ERP) systems. ERP systems are central building blocks in modern business management and play a crucial role in the integration of business processes, data management and decision-making. This module is divided into three sections, each of which focuses on practical applications and examples in addition to theory.

Section 1: ERP selection process with application examples of two ERP systems
The first part of the module is dedicated to the complex process of selecting a suitable ERP system for a company. Students are familiarized with proven methods and tools that are used in the evaluation of ERP systems. Using case studies, students compare two different ERP systems and apply the selection process in a real-life environment.

Section 2: Low-code and no-code systems with application examples
In this part, students are familiarized with low-code and no-code platforms that enable the efficient development of individual ERP applications. The focus is on dealing with a specific software solution from a leading company in this field. Students learn the basics of these platforms and create their own applications in order to experience the advantages of low-code and no-code approaches in practice.

Section 3: Customizing ERP software using the example of SAP S/4HANA
In the final part, students learn the basics of customizing ERP software. The focus is on the world's leading ERP system SAP S/4HANA. Students are enabled to adapt SAP S/4HANA to the specific requirements of a company. Practical exercises and case studies enable students to apply customizing techniques in real-life scenarios.

In addition to the theoretical information presented in the lecture, the exercises offer the opportunity to access the ERP systems and deal with the respective software in a practical way by means of extensive case studies.

Intended learning outcomes

The "Business Software 1: Management and Implementation of Information Systems" module aims to achieve the following learning outcomes:
1. ERP Systems - Overview and Differentiation: Students gain a comprehensive understanding of various ERP systems, their architectures, and philosophies.
2. Integration of Business Processes: Participants learn how ERP systems map and optimize business operations.
3. Selection and Customizing of ERP Systems: Students develop skills to evaluate, select, and adapt ERP systems to meet business needs.
4. Implementation of Business Processes: Students gain practical experience in independently implementing business processes in ERP and low-code/no-code platforms, and learn practical ERP customizing.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or

b) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: Once a year, winter semester
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Business Software 2: Enterprise-Resource-Planning-Systems			12-M-ERP-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course introduces key techniques for manual and automated modeling and analysis of business processes in enterprises. It starts with an overview of approaches and technologies to support real-time decision-making and business process (re-)design.

Intended learning outcomes

The module "Business Software 2: Data-driven Business Process Management and Automation" aims to achieve the following learning outcomes:

1. Understanding of Business Process Management: Upon completion of the course, students will be able to articulate the fundamental theories and practical methodologies of Business Process Management. This includes the ability to analyze, redesign, and implement improved business processes both manually and using automated tools.
2. Application of Modern Data Management Techniques: Students will acquire competencies in modern data management practices that are essential for real-time decision-making in business contexts.
3. Conducting Process Mining: Students will develop skills in process mining, enabling them to extract data from event logs and analyze this information to uncover inefficiencies and opportunities within business processes. They will learn to apply process mining tools and techniques to real datasets, interpret results, and propose actionable improvements.
4. Implementation of Process Automation Solutions: The course equips students with the knowledge and skills to automate business processes using industry-standard automation software such as UiPath. Students will learn to identify suitable processes for automation, design automation workflows, and implement these systems to enhance operational efficiency.
5. Engagement in Scientific Research and Practical Application: Students will expand their academic and practical understanding by engaging with fundamental research papers in the field of Business Process Management. They will also gain practical experience through case studies and hands-on projects, allowing them to effectively apply theoretical knowledge to solve real-world problems.
6. Development of Professional Competencies: Throughout the course, students will develop a range of professional skills, including critical thinking, problem-solving, teamwork, and effective communication. These competencies are crucial for successful career development in Business Process Management and related fields.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: Once a year, summer semester
creditable for bonus

Allocation of places
20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.
Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: no courses offered
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Analytical Information Systems	12-BI-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course provides an overview of the structure and applications of analytical information systems. A special focus is on individual quantitative methods of data analysis. A basic knowledge of statistics and data modelling is a prerequisite for participation in this module.

Intended learning outcomes

The module provides students with knowledge of:
(i) Data Warehousing & OLAP
(ii) Operational application areas and methods of data analysis

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places.
Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)

Master's degree (1 major) China Business and Economics (2019) Master's degree (1 major) China Language and Economy (2019) exchange program Business Management and Economics (2022)

Module title	Abbreviation
Mobile and Ubiquitous Systems	12-M-MUS-161-m01

Module coordinator	Module offered by
holder of the Chair of Information Systems Engineering	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The module provides an overview of technologies and business applications of mobile & ubiquitous computing. Concepts and applications are illustrated using numerous examples from mobile telecommunications to the Internet of Things. In the accompanying exercise, corresponding case study texts are analysed and discussed.

Intended learning outcomes

- Understand the technological basics of mobile & ubiquitous computing.

- Analysing business applications in processes, products/services and business models

- Apply the concepts learned to real-life problems in a business context

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Management (2018)

Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) Media Communication (2019)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)

Module title			Abbreviation
Seminar: Supply Chain Competition			12-M-SCC-161-m01

Module coordinator	Module offered by
holder of the Chair of Logistics and Quantitative Methods	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In the seminar "Supply Chain Competition", students participate in an online multi-round simulation and apply methods of operations and supply chain management.

Intended learning outcomes

After completing this seminar students

i. selected and applied quantitative models for procurement, production, sales and supply chain management,
ii. faced the practical problems when using real data to feed models,
iii. and understand the challenges to reach a coordinated decision in a company.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 15 to 20 pages) and presentation (approx. 10 minutes), weighted 2:1
Language of assessment: German and/or English
Assessment offered: Once a year, winter semester

Allocation of places

12 places. Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Students who already have successfully completed courses offered by the Chair of Logistics and Quantitative Methods will be given preferential consideration. (2) Among applicants with the same number of successfully completed modules, places will be allocated according to the total number of ECTS credits achieved in mandatory courses of the focus Logistik und Supply Chain Management (Logistics and Supply Chain Management) or Value Chain Management or another specialisation the applicant has selected which includes courses offered by the Chair. (3) Among applicants with the same number of ECTS credits, places will be allocated by lot.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)

Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Business Processes Organisation, Business Software and Process Industries			12-GLP-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Business Management and Business Information Systems		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

ERP systems have become key elements of successful companies. Business processes in companies can no longer be managed without using such ERP systems. In financial departments of companies, such systems have been used for a long time, but business processes e. g. for logistical tasks have so far not been supported by ERP solutions. This module explains how this issue could be resolved as well as what constraints and what dependencies have to be considered.

Intended learning outcomes

The "Business Processes Organisation, Business Software and Process Industries" module aims to achieve the following learning outcomes:

1. Fundamental Knowledge of Business Processes: Upon completing the course, students will possess a solid understanding of the essential business processes within companies. They have learned how to identify selected problems in the organization and design of logistical business processes and develop solutions.
2. Understanding and Designing ERP Systems: Students are capable of understanding and designing basic data structures and data flows within an ERP system. They have acquired practical skills to effectively map business processes within an ERP system.
3. Specialization in Industry Requirements: Participants have gained specialized knowledge of the requirements of specific industries, such as the process industry. They understand how to organize business processes considering the specific characteristics of these industries.
4. Application and Integration into ERP Systems: Students are able to map core business processes within an ERP system. They are capable of applying theoretical knowledge practically and optimizing the integration of business processes into ERP systems to support business objectives.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) Information Systems (2022)

Module title	Abbreviation
Strategic Management of Global Supply Chains	12-M-SMGS-161-m01

Module coordinator	Module offered by
holder of the Chair of Logistics and Quantitative Methods	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In the course "Strategic Management of Global Supply Chains", students will become familiar with the basic principles of building an efficient global supply chain and will apply what they have learned working on multiple case studies.

Intended learning outcomes

After completing this course students
(i) can apply the basic methods and concepts of supply chain management to practical settings and evaluate the results, and
(ii) understand the effects of global value chains onto strategic company decisions.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Global Value Management	12-M-GVM-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In this course, students will explore selected issues of procurement, production and logistics management.

Intended learning outcomes

In addition to the necessary expertise in the management of global value networks, in this seminar (inter-) disciplinary and social competences are taught, because these from procurement, production and logistics management at least partially independent capabilities provide a not important success factor of a successful (global and usually intercultural) cooperation to deal with the complex problems of the global value management.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively eLearning, S, WS

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) oral examination of one candidate each (approx. 30 minutes) or
c) term paper (approx. 15 pages)
Language of assessment: German and/or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)

Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)

Information Management

(20 ECTS credits)

Compulsory

(10 ECTS credits)

Module title			Abbreviation
E-Business Strategies			12-M-IBS-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Information Systems Engineering		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The module provides an overview of strategic implications of digital technologies at the level of organisations, industries and value networks. To this end, concepts and frameworks from strategic technology management are applied to digital innovations and illustrated with numerous examples. In the accompanying exercise, case studies of well-known digital companies and their business models are analysed and discussed.

Intended learning outcomes

- Understand theoretical concepts of strategy development and implementation in the context of digital technologies.

- Apply different frames of reference and understand their strengths and weaknesses in the context of practical application.

- Transfer the concepts to real business situations

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places. Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Information Processing within Organizations			12-IV-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module lays the foundation for understanding business informatics and explores various aspects of the field. It covers different application areas of business information systems, the latest technologies, and their integration into existing structures.

Content:
- Integration into information systems
- Change and project management, requirements engineering
- Data storage, processing, and structures
- Business logic, algorithms, optimization, system architecture, microservices, virtualization
- Internal vs. external integration, technical interfaces
- Cloud, operational models, platforms, distributed ledger technology
- Data and IT security
- Process/task mining, hyperautomation, business intelligence, machine learning

Intended learning outcomes

The "Information Processing within Organizations" module aims to achieve the following learning outcomes:
1. Knowledge of Information Systems: Students understand and apply core concepts such as data processing and system architecture, can integrate new technologies into systems, and develop practical applications.
2. Analysis of Business Processes: They recognize and analyze business information systems, model business processes, and optimize system landscapes using ERP systems and project management methods.
3. Development of Business Solutions: Students use their knowledge of modern technologies and business intelligence to develop integrative business solutions and solve operational challenges.
4. Evaluation of Technology Trends: They have a deep understanding of IT security and modern technologies, critically assess technology trends, and lead their implementation in business contexts.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Information Systems (2022)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Compulsory Core Electives

(10 ECTS credits)

Module title	Abbreviation
Adaption and Continuous System Engineering	12-ACSE-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Business Suite: The constantly changing environment with its organisational and IT-oriented developments forces companies to adapt their standard business software solutions. With the help of dynamic adaptation (Continuous System Engineering), this process of change can be supported effectively and efficiently. This module discusses both the systematic implementation of adaptation steps (so-called customising) using the example of the mySAP Business Suite and the concept of Continuous System Engineering using various practical examples. **Business Apps:** The course combines theory and practice in the area of cloud computing and ERP. Participants gain an insight into the architecture of the ByDesign platform and are presented with an opportunity to gain practical experience working with the corresponding software development kit.

Content:

- Fundamentals of cloud computing
- Cloud business solutions
- Architecture of the SAP Business ByDesign platform
- Platform adaption and extensibility
- Basics of software development in SAP Cloud Applications Studio
- Hands-on SDK: independently designing and developing a demo app

Intended learning outcomes

Business Suite: Students learn about the various ways of adapting a standard business software solution to the special requirements of a company. They also develop a fundamental understanding of the dynamic adaptation of business software libraries. Based on selected examples from the SAP Business Suite that the acquired knowledge will be deepened by using case studies. Business Apps: The course imparts knowledge and delivers skills in cloud computing for businesses, ERP systems architecture and software development at the example of the SAP Business ByDesign platform. The independent planning, implementation and documentation of a business app trains important core competencies of technology-oriented Business Informatics.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 20 pages) or
c) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: no courses offered
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016) Master's degree (1 major) Information Systems (2019) Master's degree (1 major) Information Systems (2022)

Module title	Abbreviation
Analytical Information Systems	12-BI-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course provides an overview of the structure and applications of analytical information systems. A special focus is on individual quantitative methods of data analysis. A basic knowledge of statistics and data modelling is a prerequisite for participation in this module.

Intended learning outcomes

The module provides students with knowledge of:
(i) Data Warehousing & OLAP
(ii) Operational application areas and methods of data analysis

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places.
Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)

Master's degree (1 major) China Business and Economics (2019) Master's degree (1 major) China Language and Economy (2019) exchange program Business Management and Economics (2022)

Module title			Abbreviation
Business Service Platforms 1			12-BSA-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

A next generation of enterprise systems called business service platforms is emerging using new disruptive technologies such as cloud computing, big data and mobility. These business service platforms apply the concept of product platforms to software. They will
1. be services based
2. be offered as a service in the cloud
3. address new classes of users and types of business especially in the service business
4. allow for a high degree of business adaptability and extensibility.
5. be supplemented by a broad offer of partner add-ons supporting accelerated innovation.

These new business service platforms will play a key role in the digital transformation of the software industry.

Intended learning outcomes

Be aware of the big business productivity progress enabled by BIS in the last 50 years. Understand the limitations of these systems in spite of the digital transformation of the software industry ahead. Be able to critically assess the business potential of new IC technologies. Understand the business demand for change. Understand the necessary organizational learning needed to leverage new technology for business change management.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places.
Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Business Software 1: IS-based Enterprise Management	12-GPU-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The module offers a comprehensive insight into the world of Enterprise Resource Planning (ERP) systems. ERP systems are central building blocks in modern business management and play a crucial role in the integration of business processes, data management and decision-making. This module is divided into three sections, each of which focuses on practical applications and examples in addition to theory.

Section 1: ERP selection process with application examples of two ERP systems
The first part of the module is dedicated to the complex process of selecting a suitable ERP system for a company. Students are familiarized with proven methods and tools that are used in the evaluation of ERP systems. Using case studies, students compare two different ERP systems and apply the selection process in a real-life environment.

Section 2: Low-code and no-code systems with application examples
In this part, students are familiarized with low-code and no-code platforms that enable the efficient development of individual ERP applications. The focus is on dealing with a specific software solution from a leading company in this field. Students learn the basics of these platforms and create their own applications in order to experience the advantages of low-code and no-code approaches in practice.

Section 3: Customizing ERP software using the example of SAP S/4HANA
In the final part, students learn the basics of customizing ERP software. The focus is on the world's leading ERP system SAP S/4HANA. Students are enabled to adapt SAP S/4HANA to the specific requirements of a company. Practical exercises and case studies enable students to apply customizing techniques in real-life scenarios.

In addition to the theoretical information presented in the lecture, the exercises offer the opportunity to access the ERP systems and deal with the respective software in a practical way by means of extensive case studies.

Intended learning outcomes

The "Business Software 1: Management and Implementation of Information Systems" module aims to achieve the following learning outcomes:
1. ERP Systems - Overview and Differentiation: Students gain a comprehensive understanding of various ERP systems, their architectures, and philosophies.
2. Integration of Business Processes: Participants learn how ERP systems map and optimize business operations.
3. Selection and Customizing of ERP Systems: Students develop skills to evaluate, select, and adapt ERP systems to meet business needs.
4. Implementation of Business Processes: Students gain practical experience in independently implementing business processes in ERP and low-code/no-code platforms, and learn practical ERP customizing.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or

b) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: Once a year, winter semester
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Supply Network Information Management	12-M-SCIM-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Since mass production on the assembly line with continuous deliveries (supply chain) revolutionised the procurement process in the 19th century, the usage of information processing has made more flexible operations possible and the demand of customers for individualised products has made more flexible operations necessary. It has become possible to adopt a much more differentiated and sophisticated approach to the electronic supply chain and the planning of the same so that the challenge we are facing today is designing procurement networks (supply networks) that also take into account the delivery sequence for all deterministically procured parts of all suppliers. This module will discuss these conceptual fundamentals of supply management and, in particular, how the managing of procurement activities can be supported by information processing. The module will look at how well ERP systems can support these activities, how new hardware and software technologies can be used to accelerate the currently time-consuming procurement processes and how formerly isolated information systems of individual firms can be integrated into a network of supply management.

Intended learning outcomes

Students will earn an overall understanding of the complex structure of supply relationships for individual products and their dependencies for a variety of products. Student will also be trained to recognize (from the perspective of the parties involved into the production process) opportunities and to make decisions in these regards. These relations will be of crucial importance for all production-oriented managers because only a solid understanding of these relationships will help to be successful in the marketplace.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Work and Information	12-ITA-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module discusses relevant principles, concepts and applications of business information processing and its impact on organisational and process structures in today's business world.

Intended learning outcomes

The expertise gained from other modules related to business management issues can be interpreted and classified in a certain way by participating in this module. For decisions in regards to human resources planning, investment, and a company's strategy, the students will get to know all the relevant concepts and interdependencies, which come with taking information processing into account as the so called "fourth" factor of production.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) Information Systems (2022)

Module title	Abbreviation
Decision Support Systems	12-M-DSS-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Analytics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course discusses advanced approaches for modelling and solving decision problems in business settings. The acquired insights are used to design and implement decision support systems using standard software tools (Python).

Intended learning outcomes

After successfully completing the course, students should be able to

- Understand the structure of classic business decision problems
- Isolate key elements from general problem descriptions and convert them to quantitative decision models
- Solve different classes of optimization problems (linear, network, integer, multi-objective, non-linear, stochastic)
- Implement decision support systems

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places.
Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)

Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
exchange program Business Management and Economics (2022)

Module title	Abbreviation
Information systems research	12-M-ISR-161-m01

Module coordinator	Module offered by
holder of the Chair of Information Systems Engineering	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course provides an overview of theoretical scientific foundations, theories, research topics and methods of international research in business informatics.

Intended learning outcomes

The module provides students with knowledge of:
(i) Exploration of classical themes of WI / IS research;
(ii) Getting to know the relevant paradigms, theories and methods;
(iii) Recognition of the interfaces to other areas of business administration and management practice;
(iv) Gain experience in finding and evaluation of scientific literature.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places.
Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)

Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Work Order Planning for Automated Manufacturing			12-M-AGAF-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The idea of integration of business information systems is primarily practiced and developed as an ERP system in terms of business application areas, their temporal overlap (data warehouse), their spatial relationship (supply network) and connection of legal tasks (eGovernment). However, linking the commercial view of incoming customer orders with the logistic or more technical view of the scheduling of production orders and the resulting consequences for the processes is a critical success factor.

Intended learning outcomes

Linking research and lectures of the Institute of Robotics and Telematics as well as the orientation of the Chair of Business Integration allows students a conceptual as well as practical insight into the challenges of this in the future essential part of the operational automation development.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Information Systems (2019)

Module title			Abbreviation
Management and Leadership in Organizations			12-MFO-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Part I:
The complexity of the modern work environment and the constantly changing organisational structures of companies lead to a demand for young mangers with a high diversity of expertise that are able to play their part in managing the organisational world. The lecture will provide students with an insight into the characteristics, tasks and instruments as well as the challenges of management in organisations and situations that are becoming ever more complex.

Outline of syllabus:
- Introduction -- Power in the daily management routine
- Fundamentals of management in complex organisations
- Tasks and instruments of management
- Leadership in an intercultural context
- Assurance of employability
- Conclusion -- Management of supervisors and colleagues

Part II: Today's world of work is characterised by continuous change in a global context. Mergers, integrations and acquisitions - these are key terms in this context.
The majority of change processes does not have the desired effect or even fails. This is not least due to the fact that not enough attention is paid to the complexity of these processes and to employees.
The support and integration of successful change processes is a central responsibility of managers as well as a complex and central task that requires sound preparation.

Outline of syllabus:
- Introduction - typical change scenarios
- Psychological basics and concepts
- Approaches and control in change projects
- Measures and instruments of change management
- The role of management
- Conclusion - example of application acquisitions and cases

Intended learning outcomes

Part I: Course objectives:
- Provide a widespread insight into the current status of theory and practice regarding management in complex organizations
- Introduction of essential tasks and instruments of managers and their apply to authentic cases.
- To illustrate and reflect the tensions of management in complex situations and international context

Part II: Course objectives:
- Provide a widespread insight into the current status of theory and practice regarding changes
- Introduction, suitability of daily use and critical reflection of essential concepts, models and methods
- Foster the understanding for the necessity, complexity of changes as well as their constraints and barriers.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)
written examination (approx. 60 minutes) Language of assessment: German and/or English creditable for bonus
Allocation of places
--
Additional information
--
Workload
150 h
Teaching cycle
Teaching cycle: no courses offered
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Business Processes Organisation, Business Software and Process Industries			12-GLP-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Business Management and Business Information Systems		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

ERP systems have become key elements of successful companies. Business processes in companies can no longer be managed without using such ERP systems. In financial departments of companies, such systems have been used for a long time, but business processes e. g. for logistical tasks have so far not been supported by ERP solutions. This module explains how this issue could be resolved as well as what constraints and what dependencies have to be considered.

Intended learning outcomes

The "Business Processes Organisation, Business Software and Process Industries" module aims to achieve the following learning outcomes:

1. Fundamental Knowledge of Business Processes: Upon completing the course, students will possess a solid understanding of the essential business processes within companies. They have learned how to identify selected problems in the organization and design of logistical business processes and develop solutions.
2. Understanding and Designing ERP Systems: Students are capable of understanding and designing basic data structures and data flows within an ERP system. They have acquired practical skills to effectively map business processes within an ERP system.
3. Specialization in Industry Requirements: Participants have gained specialized knowledge of the requirements of specific industries, such as the process industry. They understand how to organize business processes considering the specific characteristics of these industries.
4. Application and Integration into ERP Systems: Students are able to map core business processes within an ERP system. They are capable of applying theoretical knowledge practically and optimizing the integration of business processes into ERP systems to support business objectives.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) Information Systems (2022)

Logistics & Supply Chain Management

(20 ECTS credits)

Compulsory

(15 ECTS credits)

Module title			Abbreviation
Advanced Operations & Logistics Management			12-M-AOLM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Logistics and Quantitative Methods		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course "Advanced Operations & Logistics Management" acquaints students with advanced methods for the planning of integrated production and logistics systems and demonstrates the application of these with the help of multiple case studies

Intended learning outcomes

After completing this course students can
(i) analyze and evaluate integrated production and logistics systems;
(ii) develop and apply appropriate methods to plan complex production and logistics systems;
(iii) evaluate the consequences of uncertainties in processes, and
(iv) apply concepts and methods to plan uncertainties processes.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Global Logistics & Supply Chain Management			12-M-GLSC-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Logistics and Quantitative Methods		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course "Global Logistics & Supply Chain Management" acquaints students with advanced methods for the planning of global production networks and demonstrates the application of these with the help of multiple case studies.

Intended learning outcomes

After completing this course students can
(i) analyze and evaluate global production networks;
(ii) develop and apply appropriate methods to plan production networks;
(iii) evaluate the consequences of uncertainties in processes and apply concepts and methods to plan uncertain processes.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Managerial Analytics & Decision Making			12-M-MADM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Logistics and Quantitative Methods		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course "Managerial Analytics & Decision Making" discusses quantitative methods to structure and solve a diverse set of management problems and demonstrates the application of modern methods with the help of multiple case studies.

Intended learning outcomes

After completing this course students can
(i) better understand and structure problems;
(ii) apply important theoretical and empirical frameworks to practical problems that evaluate good and bad decision making;
(iii) implement advanced analytical methods to support decision making under risk.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Compulsory Core Electives

(5 ECTS credits)

Module title			Abbreviation
Seminar: Supply Chain Competition			12-M-SCC-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Logistics and Quantitative Methods		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

In the seminar "Supply Chain Competition", students participate in an online multi-round simulation and apply methods of operations and supply chain management.

Intended learning outcomes

After completing this seminar students

i. selected and applied quantitative models for procurement, production, sales and supply chain management,
ii. faced the practical problems when using real data to feed models,
iii. and understand the challenges to reach a coordinated decision in a company.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 15 to 20 pages) and presentation (approx. 10 minutes), weighted 2:1
Language of assessment: German and/or English
Assessment offered: Once a year, winter semester

Allocation of places

12 places. Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Students who already have successfully completed courses offered by the Chair of Logistics and Quantitative Methods will be given preferential consideration. (2) Among applicants with the same number of successfully completed modules, places will be allocated according to the total number of ECTS credits achieved in mandatory courses of the focus Logistik und Supply Chain Management (Logistics and Supply Chain Management) or Value Chain Management or another specialisation the applicant has selected which includes courses offered by the Chair. (3) Among applicants with the same number of ECTS credits, places will be allocated by lot.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)

Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title	Abbreviation
Seminar: Special Topics in Supply Chain Management	12-M-TSC-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module serves the purpose of transferring credits from
- courses taken at other German or non-German universities
- additional courses offered on a short-term basis
- courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions)

The holders of the respective Chairs will ensure that the courses are eligible for credit transfer.

Intended learning outcomes

As a result of accrediting multiple kinds of modules, a description of acquired skills cannot be given.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 15 to 20 pages) and presentation (approx. 10 minutes), weighted 2:1
Language of assessment: German and/or English
Assessment offered: Once a year, summer semester

Allocation of places

12 places. Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Students who already have successfully completed courses offered by the Chair of Logistics and Quantitative Methods will be given preferential consideration. (2) Among applicants with the same number of successfully completed modules, places will be allocated according to the total number of ECTS credits achieved in mandatory courses of the focus Logistik und Supply Chain Management (Logistics and Supply Chain Management) or Value Chain Management or another specialisation the applicant has selected which includes courses offered by the Chair. (3) Among applicants with the same number of ECTS credits, places will be allocated by lot.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Industrial Management 1			12-M-SBM-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Industrial Management	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course addresses central issues of strategic supply management. The supply function of the company (purchasing, materials management, procurement logistics) and its strategic importance is analysed and basic methods are developed that are relevant in this area.

Intended learning outcomes

Students learn the principles of performance-oriented optimization of all procurement activities to develop long-term, competitively sensitive potential for success. After completion of the module students are able to prepare structured, to goal-oriented analyze and to respond to performance-oriented issues of strategic procurement based on key instruments. Students are able to accurately classify the tasks of the procurement and to describe and discuss their strategic importance and dominate essential methods and procedures used in this area to apply.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively eLearning, S, WS

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 40 to 60 minutes) or
b) presentation (approx. 20 minutes) and term paper (approx. 15 to 20 pages); (weighted 1:1) or
c) term paper (approx. 30 to 40 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)

Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Industrial Management 2			12-M-LA-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Industrial Management	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module analyses and classifies approaches of production planning and control. In addition, it develops methods and models of lot sizing and scheduling. The focus is on the determination of optimal production and transport volumes as well as the planning of orders and manufacturing orders.

Intended learning outcomes

Students learn essential concepts, principles and methods of production planning and control with emphasis on the determination of optimal production and transport volumes as well as the planning of production and order sequences. Then, based on this expertise related knowledge broadening and deepening, essential competencies are conveyed, which allow the imaging of realistic situations and problems using mathematical and quantitative models for the derivation and assessment of alternative courses of action. After completion of the module students can answer, analyze and structure questions of production planning and control, goal-oriented. They can also arrange the planning areas in the overall business context and have an in-depth overview of the production planning and control.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively eLearning, S, WS

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 40 to 60 minutes) or
b) presentation (approx. 20 minutes) and written elaboration (approx. 15 to 20 pages); weighted 1:1 or
c) term paper (approx. 30 to 40 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)

Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Industrial Management 3	12-M-SPM-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Industrial Management	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module will discuss contents and procedures of strategic production management and, in particular, planning and control concepts.
Students will become familiar with the essentials of strategic production management. Theoretical and analytical models will be used for analysing both economic and ecological issues. In addition, the module will discuss principles of value structure optimisation and will develop competences regarding the development of integrated mathematical models.

Intended learning outcomes

After completion of the module students are able to process, to analyze and answer questions of operations strategy structured and goal-oriented in a global context using appropriate methods. Furthermore, they know the main strategic tasks and objectives in production management and evaluate and apply planning and control concepts for the production in realistic application situations.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively eLearning, S, WS

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 40 to 60 minutes) or
b) presentation (approx. 20 minutes) and term paper (approx. 15 to 20 pages); (weighted 1:1) or
c) term paper (approx. 30 to 40 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Industrial Management 4			12-M-BE-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Industrial Management	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This course will develop the objectives, principles and structure of electronically supported procurement processes with a special focus on catalogue-based procurement systems, electronic tendering systems, electronic (reverse) auctions, e-marketplaces, supplier relationship management systems and eSupply chain management systems.

Intended learning outcomes

The students will be able to describe and evaluate both the potentials and goals of electronic supported procurement systens and will be able to design appropriate systems for real-life applications. Students will get insight into the essentials of operational procurement management, especially e-procurement with a focus on catalog-based procurement systems, electronic tendering systems, electronic (reverse) auctions, e-marketplaces, supplier relationship management systems and eSupply chain management systems. After completing this module, students can define and analyze the related tasks and processes and show or develop theory-based and application-oriented possible solutions at a high professional level.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively eLearning, S, WS

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 40 to 60 minutes) or
b) presentation (approx. 20 minutes) and term paper (approx. 15 to 20 pages); (weighted 1:1) or
c) term paper (approx. 30 to 40 pages) or
d) entirely or partly computerised written examination (approx. 60 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. Should the number of applications exceed the number of available places, 15 places will be set aside for students of the Master's degree programmes Business Management and International Economic Policy or Economics and 5 places will be set aside for students of the Master's degree programme Wirtschaftsinformatik (Business Information Systems).

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Business Processes Organisation, Business Software and Process Industries			12-GLP-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Business Management and Business Information Systems		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

ERP systems have become key elements of successful companies. Business processes in companies can no longer be managed without using such ERP systems. In financial departments of companies, such systems have been used for a long time, but business processes e. g. for logistical tasks have so far not been supported by ERP solutions. This module explains how this issue could be resolved as well as what constraints and what dependencies have to be considered.

Intended learning outcomes

The "Business Processes Organisation, Business Software and Process Industries" module aims to achieve the following learning outcomes:

1. Fundamental Knowledge of Business Processes: Upon completing the course, students will possess a solid understanding of the essential business processes within companies. They have learned how to identify selected problems in the organization and design of logistical business processes and develop solutions.
2. Understanding and Designing ERP Systems: Students are capable of understanding and designing basic data structures and data flows within an ERP system. They have acquired practical skills to effectively map business processes within an ERP system.
3. Specialization in Industry Requirements: Participants have gained specialized knowledge of the requirements of specific industries, such as the process industry. They understand how to organize business processes considering the specific characteristics of these industries.
4. Application and Integration into ERP Systems: Students are able to map core business processes within an ERP system. They are capable of applying theoretical knowledge practically and optimizing the integration of business processes into ERP systems to support business objectives.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) Information Systems (2022)

Module title			Abbreviation
Theory of Industrial Organization 1			12-M-TI1-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Theory of industrial organisation:
1. Monopoly pricing
   - Nonlinear pricing and mechanism design
   - Dynamic pricing: experience goods, durable goods
2. Oligopoly pricing
   - Static price and quantity competition in homogeneous and differentiated goods markets
   - Comparative statics
   - Equilibrium market structure
3. Dynamic competition in oligopoly markets
   - Subgame perfect equilibrium and models of dynamic competition
   - Repeated games and collusion
4. Strategic behaviour by incumbent firms
   - Entry deterrence and predation
   - Signalling and reputation
5. Behavioral Industrial Organization
   - Reference Dependent Preferences and Framing Effects
   - Time inconsistent behavior

The course will be taught in English.

Intended learning outcomes

Students which complete this class will acquire a working knowledge of advanced theoretical models of competition in oligopoly markets as well as sophisticated pricing techniques in monopoly markets. They will learn the conditions under which the predictions of these models are valid. They will become familiar with applications of advanced game theoretic tools, such as dynamic models of competition, for studying interactions between firms in markets. By means of comprehensive exercises, they will apply the methods they learn in class to practically relevant problems. They will be in a position to read academic papers on related topics, assess the strengths and weaknesses of an approach, summarize and comment on these papers and suggest possible extensions.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload
150 h
Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Theory of Industrial Organization 2			12-M-TI2-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This course discusses vertical contracts in supply chains and their impact on competition.

Outline of syllabus:
1. The classic problem of double marginalisation and its solution by nonstandard contracts (resale price maintenance, nonlinear pricing (rebates), exclusive territories, exclusive dealing etc.)
2. Contracts for service
3. Common agency
4. The delegation principle
5. The commitment problem
6. Interlocking relationships
7. Foreclosure by vertical contracts or mergers

Intended learning outcomes

After completing the course students are able to
(i) explain the results of theoretical industrial economics on vertical contracts;
(ii) apply the involved methods to given simple examples on their own;
(iii) recognize, in which real life situations (and how) the results can be applied;
(iv) analyze the impact of certain vertical contracts on competition.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: In the semester in which the course is offered
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Project Management and Control			12-M-PROM-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management, Controlling and Accounting	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The module focuses on the discussion and critical examination of instruments and methods used in the context of project management and control within enterprises. Both classic and agile approaches to project management are considered. It covers characteristic features and structures of projects, their possible success factors, methods and instruments of control and management of projects in various project phases. The theoretical basis as well as potential applications of these instruments are discussed.

Intended learning outcomes

Initially, knowledge about fundamental requirements concerning instruments of project management and control is acquired. What is more, the module conveys knowledge about strengths and weaknesses and therewith fields of application and limits of commonly used instruments and methods of practitioners. Competences within the configuration and development of the project management and control as well as skills within the practical use are obtained..

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Decision Support Systems	12-M-DSS-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Analytics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course discusses advanced approaches for modelling and solving decision problems in business settings. The acquired insights are used to design and implement decision support systems using standard software tools (Python).

Intended learning outcomes

After successfully completing the course, students should be able to

- Understand the structure of classic business decision problems
- Isolate key elements from general problem descriptions and convert them to quantitative decision models
- Solve different classes of optimization problems (linear, network, integer, multi-objective, non-linear, stochastic)
- Implement decision support systems

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places.
Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)

Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
E-Business Strategies			12-M-IBS-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Information Systems Engineering		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The module provides an overview of strategic implications of digital technologies at the level of organisations, industries and value networks. To this end, concepts and frameworks from strategic technology management are applied to digital innovations and illustrated with numerous examples. In the accompanying exercise, case studies of well-known digital companies and their business models are analysed and discussed.

Intended learning outcomes

- Understand theoretical concepts of strategy development and implementation in the context of digital technologies.

- Apply different frames of reference and understand their strengths and weaknesses in the context of practical application.

- Transfer the concepts to real business situations

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places. Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Business Software 1: IS-based Enterprise Management			12-GPU-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The module offers a comprehensive insight into the world of Enterprise Resource Planning (ERP) systems. ERP systems are central building blocks in modern business management and play a crucial role in the integration of business processes, data management and decision-making. This module is divided into three sections, each of which focuses on practical applications and examples in addition to theory.

Section 1: ERP selection process with application examples of two ERP systems
The first part of the module is dedicated to the complex process of selecting a suitable ERP system for a company. Students are familiarized with proven methods and tools that are used in the evaluation of ERP systems. Using case studies, students compare two different ERP systems and apply the selection process in a real-life environment.

Section 2: Low-code and no-code systems with application examples
In this part, students are familiarized with low-code and no-code platforms that enable the efficient development of individual ERP applications. The focus is on dealing with a specific software solution from a leading company in this field. Students learn the basics of these platforms and create their own applications in order to experience the advantages of low-code and no-code approaches in practice.

Section 3: Customizing ERP software using the example of SAP S/4HANA
In the final part, students learn the basics of customizing ERP software. The focus is on the world's leading ERP system SAP S/4HANA. Students are enabled to adapt SAP S/4HANA to the specific requirements of a company. Practical exercises and case studies enable students to apply customizing techniques in real-life scenarios.

In addition to the theoretical information presented in the lecture, the exercises offer the opportunity to access the ERP systems and deal with the respective software in a practical way by means of extensive case studies.

Intended learning outcomes

The "Business Software 1: Management and Implementation of Information Systems" module aims to achieve the following learning outcomes:
1. ERP Systems - Overview and Differentiation: Students gain a comprehensive understanding of various ERP systems, their architectures, and philosophies.
2. Integration of Business Processes: Participants learn how ERP systems map and optimize business operations.
3. Selection and Customizing of ERP Systems: Students develop skills to evaluate, select, and adapt ERP systems to meet business needs.
4. Implementation of Business Processes: Students gain practical experience in independently implementing business processes in ERP and low-code/no-code platforms, and learn practical ERP customizing.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or

b) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: Once a year, winter semester
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Business Software 2: Enterprise-Resource-Planning-Systems			12-M-ERP-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course introduces key techniques for manual and automated modeling and analysis of business processes in enterprises. It starts with an overview of approaches and technologies to support real-time decision-making and business process (re-)design.

Intended learning outcomes

The module "Business Software 2: Data-driven Business Process Management and Automation" aims to achieve the following learning outcomes:

1. Understanding of Business Process Management: Upon completion of the course, students will be able to articulate the fundamental theories and practical methodologies of Business Process Management. This includes the ability to analyze, redesign, and implement improved business processes both manually and using automated tools.
2. Application of Modern Data Management Techniques: Students will acquire competencies in modern data management practices that are essential for real-time decision-making in business contexts.
3. Conducting Process Mining: Students will develop skills in process mining, enabling them to extract data from event logs and analyze this information to uncover inefficiencies and opportunities within business processes. They will learn to apply process mining tools and techniques to real datasets, interpret results, and propose actionable improvements.
4. Implementation of Process Automation Solutions: The course equips students with the knowledge and skills to automate business processes using industry-standard automation software such as UiPath. Students will learn to identify suitable processes for automation, design automation workflows, and implement these systems to enhance operational efficiency.
5. Engagement in Scientific Research and Practical Application: Students will expand their academic and practical understanding by engaging with fundamental research papers in the field of Business Process Management. They will also gain practical experience through case studies and hands-on projects, allowing them to effectively apply theoretical knowledge to solve real-world problems.
6. Development of Professional Competencies: Throughout the course, students will develop a range of professional skills, including critical thinking, problem-solving, teamwork, and effective communication. These competencies are crucial for successful career development in Business Process Management and related fields.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: Once a year, summer semester
creditable for bonus

Allocation of places
20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.
Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: no courses offered
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Analytical Information Systems	12-BI-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course provides an overview of the structure and applications of analytical information systems. A special focus is on individual quantitative methods of data analysis. A basic knowledge of statistics and data modelling is a prerequisite for participation in this module.

Intended learning outcomes

The module provides students with knowledge of:
(i) Data Warehousing & OLAP
(ii) Operational application areas and methods of data analysis

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places.
Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)

Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Mobile and Ubiquitous Systems			12-M-MUS-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Information Systems Engineering		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The module provides an overview of technologies and business applications of mobile & ubiquitous computing. Concepts and applications are illustrated using numerous examples from mobile telecommunications to the Internet of Things. In the accompanying exercise, corresponding case study texts are analysed and discussed.

Intended learning outcomes

- Understand the technological basics of mobile & ubiquitous computing.

- Analysing business applications in processes, products/services and business models

- Apply the concepts learned to real-life problems in a business context

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Management (2018)

Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) Media Communication (2019)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)

Module title			Abbreviation
Strategic Management of Global Supply Chains			12-M-SMGS-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Logistics and Quantitative Methods		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

In the course "Strategic Management of Global Supply Chains", students will become familiar with the basic principles of building an efficient global supply chain and will apply what they have learned working on multiple case studies.

Intended learning outcomes

After completing this course students
(i) can apply the basic methods and concepts of supply chain management to practical settings and evaluate the results, and
(ii) understand the effects of global value chains onto strategic company decisions.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Human Resource Management and Organization

(20 ECTS credits)

Compulsory

(10 ECTS credits)

Module title	Abbreviation
Incentives in Organizations	12-M-AO-161-m01

Module coordinator	Module offered by
holder of the Chair for Human Resource Management and Organisation	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Based on the classical principal-agent theory, this course discusses methodological and empirical aspects of incentives in organisations. It uses contents from advanced text books and original (mainly empirical) research articles.

Outline of syllabus

1. Principal-agent theory

2. Do top managers earn too much? (application)

3. Performance-based payment

4. Implementation of performance-based payment in companies (application)

5. Seniority payment (with application)

6. Financial incentives to work after retirement (with application)

7. Efficiency wages (with case study)

8. Team incentives (with case study)

Intended learning outcomes

Students acquire a working knowledge of key incentive models models, selected empirical applications and the necessary econometric background. This enables them to identify the advantages and disadvantages of different incentive systems that are applied in the enterprise context, to make informed management analyses and to critically evaluate current controversies and developments as well as to conduct their own research.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Human Resource Management and Industrial Relations			12-M-HRM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair for Human Resource Management and Organisation		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The lecture "Human Resource Management and Industrial Relations" introduces advanced theories, estimation techniques and empirical results from the areas of human resources management and institutional frameworks such as the different actors in industrial relations.

Syllabus

Introduction: Human Resource Management & Industrial Relationships

Chapter 1: The employment contract [formal model]

Chapter 2: Motivation [formal model]

Chapter 3: Employee resistance against reorganisations [empirical study]

Chapter 4: The role of works councils [formal model]

Chapter 5: Works councils and the employer wage structure [empirical study]

Chapter 6: The behaviour of labour unions [formal model]

Chapter 7: Learning process of employers [formal model and empirical study]

Chapter 8: Demographic challenges of HRM [formal model and empirical study]

Intended learning outcomes

The aim of the lectures is to enable students to understand and apply advanced theories, estimation techniques and empirical results in the area human resource management and industrial relations on the basis of scientific literature.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

20 places. There are no restrictions with regard to available places for students of the Master's degree programmes Business Management, International Economic Policy or Economics, Wirtschaftsinformatik (Business Information Systems), Wirtschaftsmathematik (Mathematics for Economics) and Chinese and Economics as well as China Business and Economics. A total of 20 places will be allocated to students of other subjects; should the number of applications exceed the number of available places, these places will be allocated by lot.

Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016) Master's degree (1 major) Applied Human Geography (2017) Master's degree (1 major) Management (2018) Master's degree (1 major) International Economic Policy (2018) exchange program Business Management and Economics (2022)

Compulsory Core Electives

(10 ECTS credits)

Module title			Abbreviation
Management and Leadership in Organizations			12-MFO-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Part I:
The complexity of the modern work environment and the constantly changing organisational structures of companies lead to a demand for young mangers with a high diversity of expertise that are able to play their part in managing the organisational world. The lecture will provide students with an insight into the characteristics, tasks and instruments as well as the challenges of management in organisations and situations that are becoming ever more complex.

Outline of syllabus:
- Introduction -- Power in the daily management routine
- Fundamentals of management in complex organisations
- Tasks and instruments of management
- Leadership in an intercultural context
- Assurance of employability
- Conclusion -- Management of supervisors and colleagues

Part II: Today's world of work is characterised by continuous change in a global context. Mergers, integrations and acquisitions - these are key terms in this context.
The majority of change processes does not have the desired effect or even fails. This is not least due to the fact that not enough attention is paid to the complexity of these processes and to employees.
The support and integration of successful change processes is a central responsibility of managers as well as a complex and central task that requires sound preparation.

Outline of syllabus:
- Introduction - typical change scenarios
- Psychological basics and concepts
- Approaches and control in change projects
- Measures and instruments of change management
- The role of management
- Conclusion - example of application acquisitions and cases

Intended learning outcomes

Part I: Course objectives:
- Provide a widespread insight into the current status of theory and practice regarding management in complex organizations
- Introduction of essential tasks and instruments of managers and their apply to authentic cases.
- To illustrate and reflect the tensions of management in complex situations and international context

Part II: Course objectives:
- Provide a widespread insight into the current status of theory and practice regarding changes
- Introduction, suitability of daily use and critical reflection of essential concepts, models and methods
- Foster the understanding for the necessity, complexity of changes as well as their constraints and barriers.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)
written examination (approx. 60 minutes) Language of assessment: German and/or English creditable for bonus
Allocation of places
--
Additional information
--
Workload
150 h
Teaching cycle
Teaching cycle: no courses offered
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Employment Law			12-M-AFW-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
2 semester	graduate	--	

Contents

Contents: employment and labour law and works constitution law incl. collective agreement law

Employment and Labour law

Legal sources of employment and labour law

Definitions, employment and labour law, employees

The employment contract

- Job application, permissible and impermissible questions in job interviews, consequences of lying, contesting the employment contract
- General Equal Treatment Act, claims for damages by applicants
- Conclusion of an employment contract, form, evidence under the Law of Proof of Substantial Conditions Applicable to the Employment Relationship
- Contents of the employment contract, company practice, overall commitment, reservation of the right of voluntariness and revocation
- General terms and conditions of business and control of terms and conditions of employment, invalid clauses and their consequences
- Limitation of the term of the employment contract, fixed term employment contracts

Rights and duties arising from the employment relationship

- Primary and secondary duties
- Employer's right to issue instructions, permissible and impermissible instructions
- Sickness, obligations to report and provide evidence under the Continued Remuneration Act
- Secondary employment, prohibition of competition, duty of confidentiality, occupational health and safety
- Granting of holiday leave
- Continued payment of wages in the event of illness, restrictions

Severe disability, special rights and protection against dismissal

Working hours and the Working Hours Act

The warning, formal and material requirements, consequences

Termination of employment

- Termination agreement
- Termination of employment
- Formal requirements
- Ordinary and extraordinary termination by the employer
- Behavioral termination
- Person-related (illness-related) dismissal

- Dismissal for operational reasons
- Special protection against dismissal

Works constitution law incl. collective bargaining law

Legal sources of works constitution law

Definitions, company, works council, employee

The works council and its role

- Works council elections
- Start, end, duration of term of office
- Legal status of members, honorary office, leave of absence, special protection against dismissal
- Entitlement for training, works council costs
- Works meetings
- General works council, group works council, youth/apprentice representation

Material co-determination of the works council, participation

- Information rights (access to gross pay roll, expert advice)
- Consultation rights (consultation before each dismissal, right to object)
- Consultation rights (involvement of the economic committee, changes in operations)

Co-determination in the narrower sense

- Rights of consent and objection (staff questionnaire, selection guidelines, recruitment, transfers)
- Refusal of consent, legal proceedings Substitution of consent

Co-determination rights

- Enforceable co-determination, conciliation board, composition, procedure, decision
- Mandatory co-determination rights of works council, e.g. regarding
- Conduct of the workplace (smoking and alcohol bans, formalized sick leave talks, occupational integration management)
- Working hours, breaks, shift and flexi-time models, overtime, short-time work
- Holidays, company holidays
- Technical equipment for monitoring (time recording, access systems, video surveillance, telephone and internet use, skills database)
- Occupational health and safety
- Social facilities (canteen, company kindergarten)
- Company wage structure, remuneration (piece rates, bonuses)
- Company changes, reconciliation of interests and social plan

Collective bargaining law

Definition, contractual and normative part, legal effect

Application of collective agreements, parties of collective agreements

Dynamic and static clauses referring to a collective agreement

Collective agreement and company agreements, blocking effect of collective agreement

Collective arbitration board in cases of compulsory works council co-determination

Intended learning outcomes

At the end of this course, students will have the following competences:

Students gain solid basic knowledge of employment and labour law, the works council and its tasks and an overview of collective agreement law. At the same time, methodically and substantively sound legal knowledge is conveyed and practical relevance is established with case studies and current case law.

By working on an exam in the form of a legal opinion, the students are taught to solve a demanding legal issue with legal problems in a given time. Within a narrow thematic field and a time-limited framework, they are able to work on a legal issue in a well-founded and largely independent manner.

Within the framework of the term paper on a judgement of the Federal Labour Court, the students deal with a concrete case and the case law of the highest German labour court. They are familiarised with the methods of legal work and are enabled to work independently in a problem-solving manner. In addition to understanding the facts of the case and the legal problems, they will focus primarily on the consequences of the judgement for their practice. Here, the legal knowledge imparted will be implemented with a practical approach and the opportunity to creatively develop their own recommendations on how to deal with the judgement. In addition, the students present the case and their own conclusions for practice. In the group discussion, the other students have the opportunity to gather further knowledge and actively participate in the exchange of opinions on current judgements and case law.

The knowledge imparted is relevant for a wide range of professional fields of activity and is especially valuable for students who will work in the field of human resources or are interested in the field of employee management.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

[a) written examination (approx. 120 minutes) and b) talk (approx. 30 minutes), weighted 3:2] or
[a) written examination (approx. 120 minutes) and c) presentation (approx. 15 minutes) and d) written elaboration of presentation (approx. 10 pages), weighted 3:1:1]

Allocation of places

30 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)

Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title	Abbreviation
Advanced Microeconomics	12-M-AM-161-m01

Module coordinator	Module offered by
holder of the Chair for Economics, Contract Theory and Information Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In a nutshell, microeconomic theory considers the behavior of individual economic agents and builds from this foundation to a theory of aggregate economic outcomes, which then can be applied for conducting welfare analysis and giving policy advice. This lecture addresses the core building block of this thought complex: individual decision making and behavior. Specifically, students will come to understand in detail the standard models of riskless consumer choice, choice under risk and intertemporal choice and learn about the empirical challenges and limitations of these models.

Throughout the lecture, we will work with precise mathematical formalizations of the ideas that we want to think and talk about. In consequence, a solid understanding of the mathematical toolbox of standard microeconomics (e.g., differential calculus and constrained optimization; basic set theory; integration by parts) will be helpful as it will allow to focus on the underlying economic intuition. However, every required mathematical concept will be introduced and explained along the way, such that a strong interest in formal economic analysis is more important than an advanced mathematical background.

The exposition is primarily based on the standard graduate textbooks

- Mas-Colell, Whinston and Green (1995): "Microeconomic Theory"
- Jehle and Reny (2001): "Advanced Microeconomic Theory"

Intended learning outcomes

After completing the course students will be able to
- explain essential findings of microeconomic theory,
- apply the involved methods to given stylized examples on their own,
- recognize in which real life situations and how the results can be applied.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) written examination (questions concerning mathematical methodology; approx. 120 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Theory of Industrial Organization 2			12-M-TI2-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This course discusses vertical contracts in supply chains and their impact on competition.

Outline of syllabus:
1. The classic problem of double marginalisation and its solution by nonstandard contracts (resale price maintenance, nonlinear pricing (rebates), exclusive territories, exclusive dealing etc.)
2. Contracts for service
3. Common agency
4. The delegation principle
5. The commitment problem
6. Interlocking relationships
7. Foreclosure by vertical contracts or mergers

Intended learning outcomes

After completing the course students are able to
(i) explain the results of theoretical industrial economics on vertical contracts;
(ii) apply the involved methods to given simple examples on their own;
(iii) recognize, in which real life situations (and how) the results can be applied;
(iv) analyze the impact of certain vertical contracts on competition.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: In the semester in which the course is offered
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Theory of Social Policy			12-M-TSP-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Labour Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This course offers an introduction to the fundamentals of causal inference and to widely used research designs in the social sciences. In the first part a framework for understanding causality is introduced. Specifically, the epistemological differences between association, intervention and counterfactuals are explained. Then it is shown why experiments are paramount in generating causal knowledge and which assumptions are needed for which level of the causal hierarchy. Finally, we will discuss two widely used approaches to causality in the social sciences, i.e. potential outcomes and directed acyclic graphs.

The second part is devoted to the research designs regressions analysis, difference-in-differences, instrumental variables, and regression discontinuity. The emphasis is how these research designs are for example applied to answer important questions in labour economics such as the effects of a minimum wage increase on employment or the effect of children on female labour supply and wages.

The assumptions each research design requires in order to identify a causal effect will be at center stage of the lecture. Therefore the emphasis is to teach students *what* one needs to estimate in order to answer a given question. Further, the research designs are discussed such that students will be able to evaluate and apply these research designs to other questions and fields.

Intended learning outcomes

At the end of the course, students should be able to understand basic concepts and methods of causal inference, as well as read, interpret, and assess the credibility of scientific publications. In addition, the course serves as preparation for advanced statistics and econometrics courses.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Labor Market Economics	12-M-OEA-161-m01

Module coordinator	Module offered by
holder of the Junior Professorship of Microeconomics, esp. Economics of Digitization	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This course provides an overview of the field of modern labor economics. The course will cover the following topics:
1. Labor supply
2. Labor demand
3. Human capital formation
4. Compensating wage differentials
5. Discrimination

The course will consist of frontal teaching of the basic theoretical as well as empirical tools as well as a careful reading of some of the key scientific articles related to the outlined topics. Students are expected to read the scientific articles in advance and will be asked to discuss them in small groups during class. In addition, a discussion of the articles will help illustrating how established scholars approach the core questions in modern labor economics and giving students an understanding of high quality empirical research.

The main reference for the lecture is Cahuc and Zylberberg. (2004): "Labor Economics", 1st edition, Massachusetts Institute of Technology. In addition, we will discuss well-published economic articles related to the single topics discussed in class.

Intended learning outcomes

The aim of this course is to acquaint students with classical as well as modern topics in labor economics and to encourage the development of research interest in this field. As such, the course's objective is to familiarize students with both the core theoretical models of labor economics as well as the main econometric methods used to provide empirical evidence.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Module title			Abbreviation
Social Insurance and the Welfare State			12-M-F3-161-m01

Module coordinator	Module offered by
holder of the Chair of Public Finance	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
This module discusses the economic justification for implementing social security systems in a market economy and provides students with deeper insights into this topic with the help of specific issues of public health and retirement policy.
Reading: lecture notes provided by Chair.

Contents:
1. Public intervention in insurance markets
2. The insurance function of social security
3. Social security and social morale
4. The optimal health insurance contract
5. Why do we need a public pension system?
6. Funding vs pay-as-you-go financing of public pensions

Intended learning outcomes

After completing the module "Theorie der Sozialversicherung" students are able to explain the theoretical foundation of the social security system in a market economy. Using simple partial equilibrium models they can discuss the financing and contract structure of the public health and pension system. Finally they are able to analyze the consequences of policy reforms.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Microeconometrics			12-M-MIK-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course teaches basics, methods and concepts for the analysis of individual data. The scaling of observed data is adequately addressed. The maximum likelihood method, which is important for this type of data, is explained in detail.

Outline
1. What is microeconometrics?
2. Models for qualitatively dependent variables
3. Models for limited dependent variables
4. Time-dependent models

References
1. Greene, W. H.: Econometric Analysis, Philip Alan.
2. Ronning, G.: Microeconometrics, Springer Verlag.
3. Verbeek, M.: Modern Econometrics, Wiley.
4. Winkelmann, R., Boes, S.: Analysis of Microdata, Springer Verlag.

Intended learning outcomes

Students have significant knowledge of the maximum likelihood method and the most important models for qualitatively and limited dependent variables. They can autonomously perform estimations with statistic programs such as R and interpret the results meaningfully.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Econometrics 1			12-M-OE1-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This module deals with the basic concept and methodology of the ordinary least squares (OLS) regression model. In particular, model assumptions and properties are discussed and formally motivated. In addition, the module examines linear restrictions on the model's explanatory variables as well as dummy variables and introduces tests to verify simple and multiple linear restrictions.

Linear algebra is used as formal aid.

Outline of syllabus:
1. Random variables
2. Important distributions
3. Point estimates
4. Simple linear regression model
5. Model assumptions
6. Model properties
7. Simple hypothesis tests
8. Multiple linear regression model
9. Linear restrictions
10. Dummy variables
11. Multiple hypothesis tests

Intended learning outcomes

The students acquire knowledge of the basics, concepts and methods used in the classical linear regression model and understand the role of econometrics in science and data analysis. In particular, they learn how to analytically derive, calculate and interpret the coefficients, standard errors and p-values of a classic regression output of the multiple regression model. Furthermore, they are able to formally state and motivate the assumptions and properties of OLS and know how to deal with transformed and dummy variables. Additionally, students will be able to test multiple linear restrictions on the parameters and will be able to apply these tests to real economic, business and social science questions.
The competences acquired in this course serve as a prerequisite for "Econometrics II", "Econometrics III", "Microeconometrics" und "Financial Econometrics".

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: each semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Econometrics 2	12-M-OE2-161-m01

Module coordinator	Module offered by
holder of the Chair of Econometrics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
This module deals with the basics, concepts and methods of the generalized least squares (GLS) framework. Partly as a motivation for the GLS model and partly for its own right, different specification and data problems as well as violations of model assumptions of the OLS estimator (as introduced in "Ökonometrie I" ("Econometrics I")) are discussed. This includes multicollinearity, a test for structural breaks, heteroskedastiticy and autocorrelation.
Linear algebra is used as formal aid.

Syllabus:
1. Specification analysis
2. Multicollinearity
3. Heteroskedastiticy
4. Autocorrelated disruptive terms
5. Generalized least squares (GLS)

Intended learning outcomes

Students acquire essential knowledge of the fundamentals, methods and concepts for estimating the generalized linear regression model (GLS) and can apply and interpret it. They are sensitized for specification problems, data problems and violations of the assumptions of the classical linear model (OLS) in order to be able to recognize, to assess and therefore adequately deal with these problems in theory and practice. This enables them to critically assess the use of the estimation methods in scientific work, to work independently on adequate implementation of empirical analyzes and to answer selected (economic) scientific issues if available data with the above-mentioned involved problems. The competences acquired in this course serve as a prerequisite for "Econometrics III", "Microeconometrics" und "Financial Econometrics".

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Work and Information			12-ITA-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module discusses relevant principles, concepts and applications of business information processing and its impact on organisational and process structures in today's business world.

Intended learning outcomes

The expertise gained from other modules related to business management issues can be interpreted and classified in a certain way by participating in this module. For decisions in regards to human resources planning, investment, and a company's strategy, the students will get to know all the relevant concepts and interdependencies, which come with taking information processing into account as the so called "fourth" factor of production.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) Information Systems (2022)

Module title	Abbreviation
Empirical HR Research with Stata	12-M-EPF-161-m01

Module coordinator	Module offered by
holder of the Chair for Human Resource Management and Organisation	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The seminar "Empirische Personalforschung" ("Empirical Personnel Economics") introduces and discusses the most important estimation problems and their application in the software package STATA. In addition, students learn, with the help of basic problems of personnel economics, how estimation programs are programmed in STATA.
Reading list to be provided in class.

Intended learning outcomes

The aim of the seminar is to enable students to understand and apply the most important estimation programmes and their application in STATA with a focus on problems in personnel economics.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 10 pages)
Language of assessment: German and/or English
Assessment offered: Once a year as announced

Allocation of places

12 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)

Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Banking and Finance

(20 ECTS credits)

Compulsory

(10 ECTS credits)

Module title			Abbreviation
Portfolio Selection and Capital Market Theory			12-M-B1a-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module is be discontinued, no courses are offered currently or will be offered in future.

This is due to one of the following reasons:

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- The contents are no longer taught and were substituted with comparable offers.

For more information, please contact the Office of the Dean of Studies of the Faculty of Business Management and Economics.

Intended learning outcomes

Due to the lack of relevance, no learning outcomes description is available because no courses are held for this module.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Agency Theory			12-M-B1b-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

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- The contents are no longer taught and were substituted with comparable offers.

For more information, please contact the Office of the Dean of Studies of the Faculty of Business Management and Economics.

Intended learning outcomes

Due to the lack of relevance, no learning outcomes description is available because no courses are held for this module.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Compulsory Core Electives

(10 ECTS credits)

Module title			Abbreviation
Option Pricing Theory			12-M-B2-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
10	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module is be discontinued, no courses are offered currently or will be offered in future.

This is due to one of the following reasons:

- The lecturer who offered the course is no longer employed at the University of Wuerzburg.
- The contents are no longer taught and were substituted with comparable offers.

For more information, please contact the Office of the Dean of Studies of the Faculty of Business Management and Economics.

Intended learning outcomes

Due to the lack of relevance, no learning outcomes description is available because no courses are held for this module.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 120 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Financial Institutions and Financial Regulation			12-M-B3-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
10	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module is be discontinued, no courses are offered currently or will be offered in future.

This is due to one of the following reasons:

- The lecturer who offered the course is no longer employed at the University of Wuerzburg.
- The contents are no longer taught and were substituted with comparable offers.

For more information, please contact the Office of the Dean of Studies of the Faculty of Business Management and Economics.

Intended learning outcomes

Due to the lack of relevance, no learning outcomes description is available because no courses are held for this module.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 120 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Finance, Accounting and Taxation

(20 ECTS credits)

Compulsory Core Electives

(20 ECTS credits)

Module title	Abbreviation
Advanced Financial Accounting (German GAAP, IFRS)	12-M-ER-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Large and mostly multinational companies are key players in our globalized economy. A wide variety of interest groups, such as investors, need access to reliable information about the economic activities of these increasingly complex companies to make the right decisions. To contribute to a better functioning of capital markets in the European Union, publicly traded companies have to apply a single set of international accounting standards to prepare their consolidated financial statements. This module covers the necessary steps to prepare and interpret consolidated financial statements under IFRS (International Financial Reporting Standards). It provides students with a systematic approach and interpretation of group accounting according to international rules. In particular, the module coveys the basic principles of group accounting and an in-depth knowledge of relevant standards. Students get to know different types of company mergers, acquisitions, and investments and the corresponding accounting methods. They will learn about the relevance of consolidated financial statements, how to identify groups and understand the consolidation process. In addition, various recent topics of group accounting are covered, e. g., positive and negative goodwill, non-controlling interests, intra-group transactions, and goodwill impairment.

Intended learning outcomes

Students understand the key concepts and elements of group accounting under IFRS (International Financial Reporting Standards). They also have an in-depth knowledge of the steps necessary to prepare and interpret consolidated financial statements following international accounting rules. In particular, students can recognize the need for consolidated financial statements, solve relevant consolidation problems, and critically evaluate consolidated financial statements.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 to 120 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
exchange program Business Management and Economics (2022)

Module title	Abbreviation
Advanced Auditing	12-M-WPF-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module covers advanced accounting topics under IFRS (International Financial Reporting Standards). It also discusses current developments in IFRS accounting and systematically classifies the related issues. The aim is to apply existing knowledge to advanced accounting problems and to develop possible solutions. The main topics adapt to current developments in the field of financial accounting.

Intended learning outcomes

Students gain a deep understanding of advanced accounting issues under IFRS (International Financial Reporting Standards). They also have the in-depth knowledge necessary to solve new and advanced accounting problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 to 120 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)

Master's degree (1 major) Economathematics (2021)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Portfolio Selection and Capital Market Theory			12-M-B1a-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

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Intended learning outcomes

Due to the lack of relevance, no learning outcomes description is available because no courses are held for this module.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Agency Theory			12-M-B1b-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module is be discontinued, no courses are offered currently or will be offered in future.

This is due to one of the following reasons:

- The lecturer who offered the course is no longer employed at the University of Wuerzburg.
- The contents are no longer taught and were substituted with comparable offers.

For more information, please contact the Office of the Dean of Studies of the Faculty of Business Management and Economics.

Intended learning outcomes

Due to the lack of relevance, no learning outcomes description is available because no courses are held for this module.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Economics of Tax Planning			12-M-SP-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Business Taxation	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This course deals with tax effects on fundamental economic decisions. Taxes are integrated into standard models for investment decisions, financing decisions, firm valuation, dividend policy and remuneration of employees. Therefore, the interaction of corporate and personal income taxes is analysed.
A reading list in English is available on request.

Intended learning outcomes

This course enables students to
(i) combine their knowledge of tax law with microeconomic analyses in the areas of corporate and personal finance;
(ii) analyze the effect of taxes on fundamental economic decisions, e.g. investment and financing decisions, evaluation of investment, financial assets, forms of remuneration for employees including managing and assessing;
(iii) read and discuss research and policy papers in the field of taxation.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages) or
c) oral examination of one candidate each (approx. 20 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Information Systems (2022)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Coordination, Budgeting and Incentives in Companies			12-M-KOBO-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Business Management, Controlling and Accounting		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module focuses on accounting-based instruments to control behavior in decentralized enterprises. The course first discusses the role of accounting in the context of decision-making and behavioral controlling as well as informational analyses. Afterwards, the most common instruments of behavioral controlling (budgeting, value-oriented management, transfer prices) are discussed with regard to theory and practice.

Intended learning outcomes

This module aims to provide knowledge in the context of behavioral control in enterprises. Knowledge about requirements on instruments used for behavioral control are discussed and competences for deployment, structure and development of coordination tools are provided.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Project Management and Control	12-M-PROM-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management, Controlling and Accounting	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The module focuses on the discussion and critical examination of instruments and methods used in the context of project management and control within enterprises. Both classic and agile approaches to project management are considered. It covers characteristic features and structures of projects, their possible success factors, methods and instruments of control and management of projects in various project phases. The theoretical basis as well as potential applications of these instruments are discussed.

Intended learning outcomes

Initially, knowledge about fundamental requirements concerning instruments of project management and control is acquired. What is more, the module conveys knowledge about strengths and weaknesses and therewith fields of application and limits of commonly used instruments and methods of practitioners. Competences within the configuration and development of the project management and control as well as skills within the practical use are obtained..

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Selected Topics in Analytical Tax Research	12-M-TBS-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Business Taxation	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module serves the purpose of transferring credits from
- courses taken at other German or non-German universities
- additional courses offered on a short-term basis
- courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions)

The holders of the respective Chairs will ensure that the courses are eligible for credit transfer.

Intended learning outcomes

As a result of accrediting multiple kinds of modules, a description of acquired skills cannot be given.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages) or
c) oral examination of one candidate each (approx. 20 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)

Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Management (2024)

Module title			Abbreviation
Selected Topics in Financial Accounting and Auditing			12-M-ATRW-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module serves the purpose of transferring credits from
- courses taken at other German or non-German universities
- additional courses offered on a short-term basis
- courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions)

The holders of the respective Chairs will ensure that the courses are eligible for credit transfer.

Intended learning outcomes

As a result of accrediting multiple kinds of modules, a description of acquired skills cannot be given.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 to 120 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Tax Accounting	12-M-STB-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Business Taxation	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module introduces the various methods of income recognition in the German Income Tax Code (*Einkommensteuergesetz*, EStG). It discusses the main reporting and valuation provisions as well as the specific problems and techniques of income calculation for partnerships.

Intended learning outcomes

Students have in-depth knowledge of tax accounting of companies and are able to solve moderate to complex problems of tax accounting in particular of sole proprietorships and partnerships using legal source.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages) or
c) oral examination of one candidate each (approx. 20 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) Information Systems (2019)

Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Information Systems (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Public Finance

(20 ECTS credits)

Compulsory

(10 ECTS credits)

Module title	Abbreviation
Policy of Taxation	12-M-F1-161-m01

Module coordinator	Module offered by
holder of the Chair of Public Finance	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
In this module, students will acquire a basic understanding of the tax system and structure applied to households in Germany. In addition, the course will include simple tax incidence analyses of specific tax policies. Reading: lecture notes provided by Chair.

Contents:
1. Fiscal harmonisation system in Germany
2. Mechanics and problems of the VAT system
3. Tax incidence analysis
4. Income tax code
5. Taxation of married couples and families
6. Taxation and household decisions

Intended learning outcomes

After completing the course "Tax Policy" students know the most important tax revenues in Germany and how they are divided between the Federation and the federal provinces. They are able to explain the incidence of specific taxes using simple case studies. Finally they can discuss tax induiced distortions of individual decisions using simple partial equilibrium models.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)

Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Social Insurance and the Welfare State			12-M-F3-161-m01

Module coordinator	Module offered by
holder of the Chair of Public Finance	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
This module discusses the economic justification for implementing social security systems in a market economy and provides students with deeper insights into this topic with the help of specific issues of public health and retirement policy.
Reading: lecture notes provided by Chair.

Contents:
1. Public intervention in insurance markets
2. The insurance function of social security
3. Social security and social morale
4. The optimal health insurance contract
5. Why do we need a public pension system?
6. Funding vs pay-as-you-go financing of public pensions

Intended learning outcomes

After completing the module "Theorie der Sozialversicherung" students are able to explain the theoretical foundation of the social security system in a market economy. Using simple partial equilibrium models they can discuss the financing and contract structure of the public health and pension system. Finally they are able to analyze the consequences of policy reforms.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Compulsory Core Electives

(10 ECTS credits)

Module title	Abbreviation
Public Debt	12-M-F2-161-m01

Module coordinator	Module offered by
holder of the Chair of Public Finance	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
The module provides an introduction to some specific issues of public debt that are in the focus of the public and scientific debate.
Reading: lecture notes provided by Chair.

Outline of syllabus:
1. Measurement of public debt
2. Growth effects of public debt
3. Intergenerational effects of public debt
4. Public debt in open economies
5. Neutrality of public debt
6. Political economy of public debt
7. Theory of souvereign debtors

Intended learning outcomes

After completing the course "National Debt" students are able to distinguish and discuss the most important measurement concepts and problems of public debt. They can discuss the growth and distributional consequences using simple equilibrium models of closed and open economies. They can evaluate the relevance of Ricardian neutrality and know the political economny explanations of rising debt levels and debt overhangs in specific countries.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)

Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Optimal Tax Theory			12-M-F4-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Public Finance		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
The course will discuss the design of an optimal tax system. First, students will learn what criteria have to be met for a tax system to be optimal. Lectures will introduce key rules for taxing commodities as well as income and capital.
Examining specific taxation issues such as eco-tax, family taxation and the taxation of international enterprises, students will then gain more in-depth insights into these rules.
Reading: Lecture notes will be provided.

Outline of syllabus:
1. Optimal commodity taxation
2. Optimal income taxation
3. Optimal taxation of families
4. International tax competition

Intended learning outcomes

After completing this module students have a basic understanding of what is meant with "optimal taxation". They are able to apply this concept to specific normative questions of tax policy in practice. Students also learn to prepare and present short papers, where they discuss specific normative policy issues in groups.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)

Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Principles of European Regulation			12-M-PRE-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This module examines the regulation of traditional network industries (railroads, electricity, telecommunications) in Europe: theory and practice

Outline of syllabus:
1. Overview of the regulation of railroads in Gemany and Europe in practice
2. Overview of the regulation of the electricity industry in Gemany and Europe in practice
3. Overview of the regulation of the telecommunications industry in Gemany and Europe in practice
4. Political economy of regulation
5. Natural monopoly and price regulation under ideal conditions
6. Price regulation under realistic circumstances
7. Procurement: advantages and disadvantages
8. Network access regulation

Intended learning outcomes

After succesfully completing this module, students wiil be able to
(i) describe central problems in regulation of the traditional network industries;
(ii) identify and apply the appropriate results from Industrial Organization;
(iii) assess the advantages and disadvantages of existing regulatory mechanisms by using results from the industrial organization theory.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) written examination (questions concerning mathematical methodology; approx. 120 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: In the semester in which the course is offered
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
European Public Finance			12-M-EFP-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Public Finance		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course aims at introducing the main public finance issues in the European Union. Students will learn how the revenues of the Union are generated and how they are spent. We will discuss the motivation and implications of the Brexit decision and various coordination problems with respect to public debt, taxation and environmental policy. Economic policy is discussed with simple models, which highlight the central problems.

Course contents:

1. The European Union: History and Institutions

2. The Budget of the European Union

3. Economic Analysis of the Brexit Process

4. Sovereign Debt, Financial Crisis and Fiscal Integration in the EMU

5. Tax Competition or Tax Coordination in Europe?

6. European Climate Policy: Emission Trading and Green Deal

Intended learning outcomes

After completing the course students are introduced to the central public finance policy issues, institutions and rules of conduct in the EU. They are able to apply simple theoretical models to to discuss and analyze more specific policy problems.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

20 places. There are no restrictions with regard to available places for students of the Master's degree programmes Business Management, International Economic Policy or Economics, Wirtschaftsinformatik (Business Information Systems), Wirtschaftsmathematik (Mathematics for Economics) and Chinese and Economics as well as China Business and Economics. A total of 20 places will be allocated to students of other subjects; should the number of applications exceed the number of available places, these places will be allocated by lot.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Applied Human Geography (2017)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Module title			Abbreviation
Computational Economics - Advanced Level			12-M-NGM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Public Finance		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This course will mostly be concerned with the analysis of public policy (in areas such as taxation, social security etc.). Providing students with state-of-the-art techniques for quantitative macroeconomic research in this very field and familiarising them with the relevant literature, this course will teach students how such policies redistribute between different generations and also within generations, how they may improve risk sharing when markets are incomplete and how they can trigger distortions and therefore hurt the aggregate economy.

Outline of syllabus:
1. Programming with FORTRAN and application of numerical methods
2. Solution techniques for dynamic programming problems
3. Policy analysis with stochastic growth and life cycle models

Reading:
Lecture notes will be provided.

Intended learning outcomes

After completing the course "Advanced Computational Economics" students will be able to
(i) edit and solve stochastic economic problems using advanced numerical techniques;
(ii) implement small scale economic models on the computer;
(iii) simulate tax and social security policy reforms and interpret the quantitative results in economic term.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Theory of Social Policy	12-M-TSP-161-m01

Module coordinator	Module offered by
holder of the Chair of Labour Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This course offers an introduction to the fundamentals of causal inference and to widely used research designs in the social sciences. In the first part a framework for understanding causality is introduced. Specifically, the epistemological differences between association, intervention and counterfactuals are explained. Then it is shown why experiments are paramount in generating causal knowledge and which assumptions are needed for which level of the causal hierarchy. Finally, we will discuss two widely used approaches to causality in the social sciences, i.e. potential outcomes and directed acyclic graphs.

The second part is devoted to the research designs regressions analysis, difference-in-differences, instrumental variables, and regression discontinuity. The emphasis is how these research designs are for example applied to answer important questions in labour economics such as the effects of a minimum wage increase on employment or the effect of children on female labour supply and wages.

The assumptions each research design requires in order to identify a causal effect will be at center stage of the lecture. Therefore the emphasis is to teach students *what* one needs to estimate in order to answer a given question. Further, the research designs are discussed such that students will be able to evaluate and apply these research designs to other questions and fields.

Intended learning outcomes

At the end of the course, students should be able to understand basic concepts and methods of causal inference, as well as read, interpret, and assess the credibility of scientific publications. In addition, the course serves as preparation for advanced statistics and econometrics courses.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Industrial Economics

(20 ECTS credits)

Compulsory

(10 ECTS credits)

Module title			Abbreviation
Theory of Industrial Organization 1			12-M-TI1-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Theory of industrial organisation:
1. Monopoly pricing
   - Nonlinear pricing and mechanism design
   - Dynamic pricing: experience goods, durable goods
2. Oligopoly pricing
   - Static price and quantity competition in homogeneous and differentiated goods markets
   - Comparative statics
   - Equilibrium market structure
3. Dynamic competition in oligopoly markets
   - Subgame perfect equilibrium and models of dynamic competition
   - Repeated games and collusion
4. Strategic behaviour by incumbent firms
   - Entry deterrence and predation
   - Signalling and reputation
5. Behavioral Industrial Organization
   - Reference Dependent Preferences and Framing Effects
   - Time inconsistent behavior

The course will be taught in English.

Intended learning outcomes

Students which complete this class will acquire a working knowledge of advanced theoretical models of competition in oligopoly markets as well as sophisticated pricing techniques in monopoly markets. They will learn the conditions under which the predictions of these models are valid. They will become familiar with applications of advanced game theoretic tools, such as dynamic models of competition, for studying interactions between firms in markets. By means of comprehensive exercises, they will apply the methods they learn in class to practically relevant problems. They will be in a position to read academic papers on related topics, assess the strengths and weaknesses of an approach, summarize and comment on these papers and suggest possible extensions.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload
150 h
Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
European Competition Policy			12-M-WPE-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Outline of syllabus:
1. Legal environment, competition laws
2. Market definition
   - Qualitative methods
   - Simple quantitative methods
   - Hypothetical monopoly test
3. Horizontal agreements and collusion: repeated games and factors affecting likelihood of collusion
4. Horizontal mergers and collusion
   - Economic theory
   - Efficiency effects
   - Coordinated effects
5. Vertical relations and contracts
   - Economic analysis of contracts
   - "More economic approach"
6. Abuse of dominant position
   - Classification of abusive conduct
   - Economic analysis of abusive conduct and theory of harm

The course will be taught in English.

Intended learning outcomes

After completion of the module students can use the advanced concepts introduced in the lecture of competition policy, including the legal framework, the trace models and methods for the study of competition policy issues, as well as understand the approach of European competition policy in high profile cases. When they are confronted with practical problems, they can refer to these cases, and the same logic to practical examples apply by draining the relevant economic theories that identify variables to be measured and methodologies for assessing, and based on that adequate conclusions for appropriate cases. They will sufficiently understand the subject in order to open up that build upon literature in journals and being able to think critically.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. There are no restrictions with regard to available places for students of the Master's degree programmes Business Management, International Economic Policy or Economics, Wirtschaftsinformatik (Business Information Systems), Wirtschaftsmathematik (Mathematics for Economics) and Chinese and Economics as well as China Business and Economics. A total of 20 places will be allocated to students of other subjects; should the number of applications exceed the number of available places, these places will be allocated by lot.

Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) Media Communication (2016) Master's degree (1 major) China Language and Economy (2016) Master's degree (1 major) Applied Human Geography (2017) Master's degree (1 major) Media Communication (2018) Master's degree (1 major) Media Communication (2019)

Compulsory Core Electives

(10 ECTS credits)

Module title			Abbreviation
Advanced Microeconomics			12-M-AM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair for Economics, Contract Theory and Information Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

In a nutshell, microeconomic theory considers the behavior of individual economic agents and builds from this foundation to a theory of aggregate economic outcomes, which then can be applied for conducting welfare analysis and giving policy advice. This lecture addresses the core building block of this thought complex: individual decision making and behavior. Specifically, students will come to understand in detail the standard models of riskless consumer choice, choice under risk and intertemporal choice and learn about the empirical challenges and limitations of these models.

Throughout the lecture, we will work with precise mathematical formalizations of the ideas that we want to think and talk about. In consequence, a solid understanding of the mathematical toolbox of standard microeconomics (e.g., differential calculus and constrained optimization; basic set theory; integration by parts) will be helpful as it will allow to focus on the underlying economic intuition. However, every required mathematical concept will be introduced and explained along the way, such that a strong interest in formal economic analysis is more important than an advanced mathematical background.

The exposition is primarily based on the standard graduate textbooks

- Mas-Colell, Whinston and Green (1995): "Microeconomic Theory"
- Jehle and Reny (2001): "Advanced Microeconomic Theory"

Intended learning outcomes

After completing the course students will be able to
- explain essential findings of microeconomic theory,
- apply the involved methods to given stylized examples on their own,
- recognize in which real life situations and how the results can be applied.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) written examination (questions concerning mathematical methodology; approx. 120 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Principles of European Regulation	12-M-PRE-161-m01

Module coordinator	Module offered by
holder of the Chair of Industrial Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
This module examines the regulation of traditional network industries (railroads, electricity, telecommunications) in Europe: theory and practice

Outline of syllabus:
1. Overview of the regulation of railroads in Gemany and Europe in practice
2. Overview of the regulation of the electricity industry in Gemany and Europe in practice
3. Overview of the regulation of the telecommunications industry in Gemany and Europe in practice
4. Political economy of regulation
5. Natural monopoly and price regulation under ideal conditions
6. Price regulation under realistic circumstances
7. Procurement: advantages and disadvantages
8. Network access regulation

Intended learning outcomes

After succesfully completing this module, students wiil be able to
(i) describe central problems in regulation of the traditional network industries;
(ii) identify and apply the appropriate results from Industrial Organization;
(iii) assess the advantages and disadvantages of existing regulatory mechanisms by using results from the industrial organization theory.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) written examination (questions concerning mathematical methodology; approx. 120 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: In the semester in which the course is offered
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Theory of Industrial Organization 2			12-M-TI2-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This course discusses vertical contracts in supply chains and their impact on competition.

Outline of syllabus:
1. The classic problem of double marginalisation and its solution by nonstandard contracts (resale price maintenance, nonlinear pricing (rebates), exclusive territories, exclusive dealing etc.)
2. Contracts for service
3. Common agency
4. The delegation principle
5. The commitment problem
6. Interlocking relationships
7. Foreclosure by vertical contracts or mergers

Intended learning outcomes

After completing the course students are able to
(i) explain the results of theoretical industrial economics on vertical contracts;
(ii) apply the involved methods to given simple examples on their own;
(iii) recognize, in which real life situations (and how) the results can be applied;
(iv) analyze the impact of certain vertical contracts on competition.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: In the semester in which the course is offered
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Empirical Industrial Organization			12-M-EIO-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

1. (Recap of) Econometric methods
   - Ordinary Least Squares (OLS)
   - Endogeneity and how to deal with it (Instrumental Variables)
2. Estimation of demand
   - Representative consumer models
   - Multinomial Logit Model (ML) and extensions
   - Discrete choice models with individual data
   - Discrete choice models with aggregate data
3. Further applications
   - Demand and Supply estimation
   - Inferring marginal costs
   - Using structural models for counterfactual policy analysis

Intended learning outcomes

The students taking this class will learn modern empirical methods in studying questions related to industry outcomes. They will become familiar with methods used in estimating demand and during exercises will learn how one can implement these methods in practice using statistical software. The lectures will help students to have a thorough understanding of the so-called New Empirical Industrial Organization (NEIO) methodology. The students will become familiar with methods used in estimating demand and imperfect competition models among firms. They will learn how to use such models to infer marginal costs as well as constructing policy simulations based on the estimated models to evaluate the effects of changes in the competitive environment, such as mergers. A student that successfully completes this course will not only be able to read empirical academic papers but will also implement a few important models in computer exercises. Furthermore, students will be able to draw implications of empirical studies for economic policy in areas such as antitrust and regulation.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) written examination (questions concerning mathematical methodology; approx. 120 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Economics of Information and Network Industries			12-M-EIN-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Outline of syllabus:
1. Network effects
   - Consumer demand in markets with network effects and rational expectations
   - Monopoly pricing
   - Competition in markets with network effects
   - Compatibility and multihoming
   - Dynamic competition
   - Competition policy issues in industries with network effects
2. Competition in markets with switching costs
   - Simple two period models of markets with switching costs
   - Various modelling possibilities for switching costs
   - Switching costs and long-run prices
3. Two(Multi)-Sided Markets and Platforms
   - Monopoly pricing in platform markets
   - Competition in platform markets
   - Divide and conquer strategies
   - Non-price strategies
   - Competition policy issues in platform markets
4. Access pricing in network industries
   - Network competition and role of access prices
   - Regulation of access prices

The course will be taught in English.

Intended learning outcomes

After completion of the module students can understand and explain themselves the in the lecture introduced advanced concepts of economics, information and network industries (including their mathematical representation form). They will be able to refer to the modeling examples from the practice by impute obvious corporate strategies and can predict the market outcome, evaluate information and network industries from the perspective of the state and, if necessary, appropriate policy action alternatives derived. They will sufficiently understand the subject in order to open up that build upon literature in journals and being able to think critically.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) written examination (questions concerning mathematical methodology; approx. 120 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: no courses offered
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Topics in Industrial Organization 1			12-M-TIO1-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

In addition to being similar to the regular "Topics in Industrial Organization" course, this course can be used for bringing in credits from courses visited in other universities. These courses should be from an area that is related to industrial economics or game theory.

Intended learning outcomes

Due to the crediting of different modules, no competence description can be made.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: In the semester in which the course is offered
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Topics in Industrial Organization 2			12-M-TIO2-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

In addition to being similar to the regular "Topics in Industrial Organization" course, this course can be used for bringing in credits from courses visited in other universities. These courses should be from an area that is related to industrial economics or game theory.

Intended learning outcomes

Due to the crediting of different modules, no competence description can be made.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: In the semester in which the course is offered
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Topics in Industrial Organization 3			12-M-TIO3-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

In addition to being similar to the regular "Topics in Industrial Organization" course, this course can be used for bringing in credits from courses visited in other universities. These courses should be from an area that is related to industrial economics or game theory.

Intended learning outcomes

Due to the crediting of different modules, no competence description can be made.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: In the semester in which the course is offered
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Contract Economics	12-M-CE-161-m01

Module coordinator	Module offered by
holder of the Chair for Economics, Contract Theory and Information Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

During the 1960/70s, microeconomic theory came to acknowledge that many (if not most) economic transactions are characterized by asymmetric distribution of information – i.e., at least one of the parties participating in a transaction usually is privy to information that the remaining parties do not have access to. This asymmetric distribution of information subsequently was recognized to be a major impediment for transactions to be economically efficient. Contract theory addresses the question how the inefficiencies arising from asymmetric distribution of information can best be mitigated by appropriate design of the contractual (or, more generally, institutional) framework that governs the transaction under consideration. This lecture covers the baseline models of "moral hazard" (i.e., situations where one party has private knowledge after a contract has been signed) and "adverse selection" (i.e., situations where one party has private knowledge before a contract is signed). As applications we will address questions discussed in organizational, personnel or industrial economics, such as incentive design within organizations or the design of labor law regulations and competition laws.

Even though we will work with precise mathematical formalizations of the ideas that we want to think and talk about, this course requires little more than a solid understanding of basic differential calculus. More important than having a solid mathematical background is having a strong interest in formal economic analysis and fun with logical thinking and puzzle solving.

The exposition is primarily based on the following textbook: Laffont and Martimort (2002): "The Theory of Incentives"

Intended learning outcomes

After completing the course students will be able to
- explain essential findings of contract theory,
- apply the involved methods to given stylized examples on their own,
- interpret the properties of real-life contracts as the outcome of the interaction between two or more contracting parties in the presence of asymmetric information,
- evaluate government interventions with regard to their effect on the efficiency properties of the interaction between the contracting parties.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: Once a year, summer semester
creditable for bonus

Allocation of places

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Additional information

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Workload
150 h
Teaching cycle
Teaching cycle: no courses offered
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Strategic Decisions and Competition			12-M-SDC-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

1. Strategic situations and decision making

2. Analyzing strategic situations with game theory

1. Noncooperative simultaneous move games
2. Nash equilibrium
3. Models of oligopoly markets

3. Dynamic Games

1. Two(-multi) stage games and subgame perfect equilibrium
2. Role of commitment in dynamic situations
3. Models of advertising
4. Wage bargaining and unions

4. Repeated Games

1. Emergence of coordination in long interactions
2. Collusion between competing firms
3. Time consistent monetary policy

5. Static games of incomplete Information

1. Bayesian Nash equilibrium
2. Auctions

6. Dynamic games of incomplete information

1. Moral hazard and nonlinear pricing
2. Perfect Bayesian equilibrium
3. Signalling games
4. Job-market signalling
5. Corporate investment and capital structure

Intended learning outcomes

After successful completion of this class, the students should be familiar with economic models that can be used to shape managerial strategy and aid in making decisions in strategic situations. Especially, by making use of simple two stage games, they should be able to formulate dynamic policies in a wide variety of strategic situations. The students will acquire an intuitive understanding of the underlying economic mechanisms which emerge from the analysis of game theoretic models for a wide variety of strategic situations arising in industrial economics, marketing, organization, finance, trade and labor. Moreover, they will acquire skills which enable them to make predictions in strategic situations by making use of simple mathematical models. By means of completing case based exercises, they will learn to transform real life business situations to an appropriate economic model. Based on an analysis of this model, they will be able to devise optimal strategies and derive the corresponding managerial implications.

The course will be taught in English.
Courses (type, number of weekly contact hours, language — if other than German)
V (2) + Ü (2)
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)
a) written examination (approx. 60 to 120 minutes) or b) term paper (approx. 15 to 20 pages) Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered creditable for bonus
Allocation of places
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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
German and European Antitrust Law 1			02-N-P-W13-161-m01
Module coordinator		**Module offered by**	
Dean of Studies Faculty of Law		Faculty of Law	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
3	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	undergraduate	--	

Contents

German contents available but not translated yet.

Die Vorlesung bietet einen Überblick über das Deutsche und Europäische Kartellrecht. Es wird das Zusammenspiel der Normen des EG-Vertrages sowie einschlägiger Sekundärrechtsakte mit dem deutschen Gesetz gegen Wettbewerbsbeschränkungen (GWB), insbesondere im Bereich des Kartellverbots und der Missbrauchsaufsicht, dargestellt. Zudem werden die Grundlagen der Fusionskontrolle behandelt und anhand von ausgewählten Einzelthemen vertieft.

Intended learning outcomes

German intended learning outcomes available but not translated yet.

Die Studierenden haben grundlegende Kenntnisse des Deutschen und Europäischen Kartellrechts erworben. Sie können Problematiken aus diesen Bereichen in den Kontext der deutschen und europäischen Regelungen einordnen.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 120 minutes) or
b) oral examination (approx. 15 minutes)
Assessment offered: Usually once a year, winter semester

Allocation of places

10 places. There are no restrictions with regard to available places for students of the degree programme Rechtswissenschaft (Law) pursuing the degree Erste Juristische Staatsprüfung (first state examination in law) as well as Bachelor's students with the minor Privatrecht (Private Law). A total of 10 places will be allocated to students of the Master's degree programme Economics. Should there be more than 10 applications, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

90 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) International Economic Policy (2015)

Module title			Abbreviation
German and European Antitrust Law 2			02-N-P-W21-161-m01
Module coordinator		**Module offered by**	
Dean of Studies Faculty of Law		Faculty of Law	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
3	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	unknown	--	

Contents

No information on contents available.

Intended learning outcomes

No information on intended learning outcomes available.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 120 minutes) or
b) oral examination (approx. 15 minutes)
Assessment offered: Usually once a year, summer semester

Allocation of places

There are no restrictions with regard to available places for students of the degree programme Rechtswissenschaft (Law) pursuing the degree Erste Juristische Staatsprüfung (first state examination in law) as well as Bachelor's students with the minor Privatrecht (Private Law). A total of 10 places will be allocated to students of the Master's degree programmes International Economic Policy or Economics, Business Management as well as Wirtschaftsmathematik (Mathematics for Economics). Should there be more than 10 applications, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

90 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) International Economic Policy (2015)

National and International Monetary Economics

(20 ECTS credits)

Compulsory

(10 ECTS credits)

Module title	Abbreviation
Monetary Policy and the Financial System	12-M-EG1-161-m01

Module coordinator	Module offered by
holder of the Chair of Monetary Economics and International Financial Markets	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module is a thorough introduction to monetary policy. The course is divided into four sections. The first one repeats macroeconomic concepts. The second one deals with core topics on monetary policy and theory. In the third one, monetary policy with the zero lower bound on nominal interest rates constraint is analyzed. The fourth section deals with linkages between monetary and fiscal policy.

Format of the module: lectures and exercise sessions

Prerequisites: Basic knowledge of microeconomics and macroeconomics as taught in Bachelor programs in Economics, Business or similar fields.

Usability: Master International Economic Policy

Requirements for getting credit points according to the Eropean Credit Transfer System (ECTS): Passing the final exam.

ECTS and grading: 5 ECTS, Grading on a scale from 1-5 based on the final exam.

Frequency of the module: Each winter term

Workload: 150 hours (Lecture + Exercise Session + Self Study)

Duration: 1 Semester

Intended learning outcomes

Students will acquire a thorough understanding of the theory and practice of monetary policy. Students gain expertise on institutional aspects and theoretical monetary models. Having completed the module, students will be able to understand current developments in monetary policy and and apply models and theories to analyze and evaluate these.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

30 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload
150 h
Teaching cycle
Teaching cycle: after announcement
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) Media Communication (2016) Master's degree (1 major) China Language and Economy (2016) Master's degree (1 major) Media Communication (2018) Master's degree (1 major) Media Communication (2019)

Module title			Abbreviation
Monetary Policy, Foreign Exchange Markets, and the International Monetary System			12-M-EG2-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Monetary Economics and International Financial Markets		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course deals with the following topics:

The foreign exchange market:
Functioning of foreign exchange markets; market structure, players and evolution; FX transactions; hedging and speculation with FX.

Exchange rate economics:
Theoretical background and empirical validity of covered interest parity (CIP), uncovered interest rate parity (UIP) and purchasing power parity (PPP); Monetary approach: Flexible price monetary model and sticky price (Dornbusch-) overshooting model; Balassa-Samuelson effect; FX valuation via the PPP and the macroeconomic balance approach; Real effective exchange rates; Empirical validity of the exchange rate theories; Exchange rates and the current account.

Exchange rate regimes and monetary policy in open economies:
Classification of exchange rate regimes; the policy trilemma in open economies; historical development of the international monetary system; central bank interventions on the FX market.

Modelling open economy macroeconomics at the intermediate level:
Implications of the Mundell-Fleming model for monetary and fiscal policy under fixed and flexible exchange rates.
The BMW (IS-MP-PC) model of the open economy and its implication for monetary and fiscal policy under fixed and flexible exchange rates; optimum currency areas in the BMW model and in practice.

Currency crises:
International experience with currency crises since the 1970s; modelling currency crises within the Mundell-Fleming framework.

Managed-floating as a solution for the policy trilemma.

Intended learning outcomes

By completing this course, students receive a profound understanding of the functioning of foreign exchange markets, the drivers of exchange rate movements and some exchange rate valuation methods used in practice. Next to a profound knowledge of exchange rate theory the course highlights its practical applicability, e.g. as an investment strategy. In the second part of the course students learn the principles of monetary policy in open economies, including its trade-offs and risks like currency crises. Students will be able to analyze these issues based on theoretical models as well as the international historical experience.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)

Language of assessment: German and/or English

Allocation of places

30 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Compulsory Core Electives

(10 ECTS credits)

Module title	Abbreviation
DSGE Modelling	12-M-DMM-161-m01

Module coordinator	Module offered by
head of the Work Group of Empirical Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course offers an introduction to "Dynamic Stochastic General Equilibrium Modelling" (DSGE). These models are designed to describe the business cycle at the macro level. In a first step, we analyse the behaviour of a representative household. In particular, we describe how consumption, asset allocation and labour supply plans are formulated. In a second step, we focus on the firm sector and address how firms solve for optimal production plans. In a third step, we explain what role the central bank plays in stabilising the business cycle. Thereby, we show how changes in interest rates interact with optimal decisions taken by households and firms.
We also discuss hot topics such as CAPM models and monetary policy in the euro area.

Intended learning outcomes

The course offers analytical tools designed to solve DSGE models. These analytical skills encompas:

- Solving of intertemporal optimization problems (e.g., consumption Euler-equations).
- Linearization methods (e.g., Taylor-expansions).
- Solving linear difference expectations by minimum state variabel techniques (MSV-solution).
- Basic time series concepts such as impilse response functions, variance decompositions.
- Basic insights in MATLAB/ Dynare programming: specifying, solving and estimating DSGE models.

Based on the course students are able themselves to design and implement DSGE models.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
European Macroeconomic Policy			12-M-EMP-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Monetary Economics and International Financial Markets		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

In particular, the course outline is as follows:

I. Targets of macroeconomic policy

II. The mechanics of the two core macroeconomic models

a. The classical model of a self-stabilizing corn economy

b. The Keynesian model of a monetary economy with inherent instability

c. The financial system and banks in the two models

III. The diverging policy implications of the two paradigms

a. Unemployment: wage rigidities versus rationing of the labor market by the goods market

b. Government debt: Crowding out versus Modern Monetary Theory (MMT)

c. Inflation: quantity theory versus Phillips curve

d. The incompatibility of the two worlds

IV. A simple IS/MP/PC model

V. The monetary policy of the ECB

a. The mandate of the ECB and possible trade-offs with unemployment and financial stability

b. Conventional/unconventional instruments of the ECB / The risk of fiscal dominance

c. ECB strategy and climate policy

d. The threat of deflation and the Zero-Lower Bound

VI. The difficult task of coordinating 19 independent national fiscal policies in the EMU

a. Specific challenges due to lack of political integration: Lack of coordination versus lack of fiscal discipline

b. The limitations set by Stability and Growth Pact

c. The rationale of fiscal rules: Maastricht Treaty, Fiscal Compact/Debt Brake, Golden Rule / reform proposals

VII. Specific EMU topics

a. Is the EMU an optimum currency area?

b. The financial crisis and the euro crisis: The dismal performance of the ECB until 2012 and the paradigm change by Mario Draghi ("Whatever it takes")

c. The ECB in the Corona crisis and Next Generation EU

Intended learning outcomes

By the end of the course, students will have gained a basic understanding of European macroeconomics.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

20 places. There are no restrictions with regard to available places for students of the Master's degree programmes Business Management, International Economic Policy or Economics, Wirtschaftsinformatik (Business Information Systems), Wirtschaftsmathematik (Mathematics for Economics) and Chinese and Economics as well as China Business and Economics. A total of 20 places will be allocated to students of other subjects; should the number of applications exceed the number of available places, these places will be allocated by lot.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Applied Human Geography (2017)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Module title			Abbreviation
Portfolio Selection and Capital Market Theory			12-M-B1a-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module is be discontinued, no courses are offered currently or will be offered in future.

This is due to one of the following reasons:

- The lecturer who offered the course is no longer employed at the University of Wuerzburg.
- The contents are no longer taught and were substituted with comparable offers.

For more information, please contact the Office of the Dean of Studies of the Faculty of Business Management and Economics.

Intended learning outcomes

Due to the lack of relevance, no learning outcomes description is available because no courses are held for this module.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Econometrics 1			12-M-OE1-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This module deals with the basic concept and methodology of the ordinary least squares (OLS) regression model. In particular, model assumptions and properties are discussed and formally motivated. In addition, the module examines linear restrictions on the model's explanatory variables as well as dummy variables and introduces tests to verify simple and multiple linear restrictions.

Linear algebra is used as formal aid.

Outline of syllabus:
1. Random variables
2. Important distributions
3. Point estimates
4. Simple linear regression model
5. Model assumptions
6. Model properties
7. Simple hypothesis tests
8. Multiple linear regression model
9. Linear restrictions
10. Dummy variables
11. Multiple hypothesis tests

Intended learning outcomes

The students acquire knowledge of the basics, concepts and methods used in the classical linear regression model and understand the role of econometrics in science and data analysis. In particular, they learn how to analytically derive, calculate and interpret the coefficients, standard errors and p-values of a classic regression output of the multiple regression model. Furthermore, they are able to formally state and motivate the assumptions and properties of OLS and know how to deal with transformed and dummy variables. Additionally, students will be able to test multiple linear restrictions on the parameters and will be able to apply these tests to real economic, business and social science questions.
The competences acquired in this course serve as a prerequisite for "Econometrics II", "Econometrics III", "Microeconometrics" und "Financial Econometrics".

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: each semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Advanced Macroeconomics			12-M-MFF-161-m01
Module coordinator			**Module offered by**
holder of the Chair of International Economics			Faculty of Management and Economics
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

The course covers long-run aspects of macroeconomics. We start with a review of the facts of long-run growth and a review of the Solow-growth model. The lecture then focuses on the infinite-horizon Ramsey-Cass-Koopmans model, on endogenous growth theory and it puts the roles of human capital and institutions under scrutiny. Applications of this framework involving urban and regional growth, resources and the environment will be taken up, time permitting.

Outline

I Facts and the Solow Growth Model

II Infinite-Horizon Ramsey-Cass-Koopmans model

III Endogenous Growth

IV Human Capital, Social Infrastructure and Beyond

V Applications (Urban and regional growth; Growth, resources and the environment)

Literature:

The course draws strongly on the textbook:

David Romer, Advanced Macroeconomics, 4th edition, McGraw-Hill Irwin.

We will use journal articles and research papers at several parts of the lecture.

Intended learning outcomes

Students acquire a working knowledge of the key models and analytical tools of advanced macroeconomics. This enables them to identify the key forces that determine the determinants of income levels and growth rates of incomes, to make informed policy analysis and statements and to critically evaluate current controversies and developments as well as to conduct their own research.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Selected Topics of European Integration			12-M-SEI-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Monetary Economics and International Financial Markets		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The module provides students with a more in-depth understanding of specific problems of macroeconomics and current economic policy.

Intended learning outcomes

After the seminar, students can
(i) consolidate acquired knowledge and if necessary apply additional techniques of scientific work;
(ii) create, present and defend a scientific paper;
(iii) deal with the working papers of other participants;
(iv) prepare beter for the processing of the master's thesis.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 15 pages) and presentation (approx. 15 minutes), weighted 2:1
Language of assessment: German and/or English
Assessment offered: Once a year, summer semester

Allocation of places

15 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)

Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)

Econometrics

(20 ECTS credits)

Compulsory

(10 ECTS credits)

Module title			Abbreviation
Econometrics 1			12-M-OE1-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This module deals with the basic concept and methodology of the ordinary least squares (OLS) regression model. In particular, model assumptions and properties are discussed and formally motivated. In addition, the module examines linear restrictions on the model's explanatory variables as well as dummy variables and introduces tests to verify simple and multiple linear restrictions.

Linear algebra is used as formal aid.

Outline of syllabus:
1. Random variables
2. Important distributions
3. Point estimates
4. Simple linear regression model
5. Model assumptions
6. Model properties
7. Simple hypothesis tests
8. Multiple linear regression model
9. Linear restrictions
10. Dummy variables
11. Multiple hypothesis tests

Intended learning outcomes

The students acquire knowledge of the basics, concepts and methods used in the classical linear regression model and understand the role of econometrics in science and data analysis. In particular, they learn how to analytically derive, calculate and interpret the coefficients, standard errors and p-values of a classic regression output of the multiple regression model. Furthermore, they are able to formally state and motivate the assumptions and properties of OLS and know how to deal with transformed and dummy variables. Additionally, students will be able to test multiple linear restrictions on the parameters and will be able to apply these tests to real economic, business and social science questions.
The competences acquired in this course serve as a prerequisite for "Econometrics II", "Econometrics III", "Microeconometrics" und "Financial Econometrics".

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: each semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Econometrics 2	12-M-OE2-161-m01

Module coordinator	Module offered by
holder of the Chair of Econometrics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
This module deals with the basics, concepts and methods of the generalized least squares (GLS) framework. Partly as a motivation for the GLS model and partly for its own right, different specification and data problems as well as violations of model assumptions of the OLS estimator (as introduced in "Ökonometrie I" ("Econometrics I")) are discussed. This includes multicollinearity, a test for structural breaks, heteroskedastiticy and autocorrelation.
Linear algebra is used as formal aid.

Syllabus:
1. Specification analysis
2. Multicollinearity
3. Heteroskedastiticy
4. Autocorrelated disruptive terms
5. Generalized least squares (GLS)

Intended learning outcomes

Students acquire essential knowledge of the fundamentals, methods and concepts for estimating the generalized linear regression model (GLS) and can apply and interpret it. They are sensitized for specification problems, data problems and violations of the assumptions of the classical linear model (OLS) in order to be able to recognize, to assess and therefore adequately deal with these problems in theory and practice. This enables them to critically assess the use of the estimation methods in scientific work, to work independently on adequate implementation of empirical analyzes and to answer selected (economic) scientific issues if available data with the above-mentioned involved problems. The competences acquired in this course serve as a prerequisite for "Econometrics III", "Microeconometrics" und "Financial Econometrics".

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Compulsory Core Electives

(10 ECTS credits)

Module title			Abbreviation
Econometrics 3			12-M-OE3-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This module deals with advanced econometric methods and concepts based on the classical and the generalized least squares estimator discussed in Ökonometrie I and II (Econometrics I and II). In particular, this includes the instrumental variable (IV) estimator, the generalized method of moments (GMM) estimator, distributed lag models as well as basic methods and concepts used in uni- and multivariate econometric time series analysis, including (non)stationarity, integration and cointegration.
Linear algebra is used as formal aid.

Syllabus:
1. Error-in-variables
2. IV estimation
3. Generalized least squares estimation
4. Distributed lag models
5. Stationary uni- and multivariate processes
6. Deterministic and stochastic trends
7. Integrated and cointegrated processes

Intended learning outcomes

The students acquire thorough understanding of advanced methods and concepts in econometrics. They get familiarized with diverse error-in-variables issues and will be capable of handling them appropriately. After the course, students understand the generalized method of moments (GMM) and the instrumental variable (IV) estimator to the extent that they can discuss their pros and cons, apply these to selected questions in quantitative economics and understand scientific papers using these methods. Furthermore, they become acquainted with selected time series issues, such as distributed lag models, non-stationarity, spurious correlation and cointegrated processes, enabling them to conduct a comprehensive time series analysis. In brief, the course enables students to apply the above mentioned methods and concepts to real life questions, assess their appropriateness and address their theoretical and practical benefits and shortcomings.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

--

Additional information

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Workload

150 h

Teaching cycle
Teaching cycle: after announcement
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Analysis of Financial Market Data			12-M-FMO-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
The module covers the fundamentals, methods and concepts for the empirical analysis of financial market data. The concept of market efficiency is explained and critically examined with reference to the random walk hypothesis. To test this hypothesis, a number of parametric and non-parametric methods are proposed and applied in practice. Based on the findings, market microstructure models that can explain some important empirical findings will be discussed. In addition, the course describes event studies for testing the significant impact of corporate news on the share price and discusses issues of univariate time series analysis such as AR(I)MA and ARCH / GARCH models that are indispensable for modelling financial market data. In the final part of the course, CAPM is discussed and examined, in particular with regard to its empirical applicability.

Syllabus:
1. Information efficiency
2. Random walk
3. Theoretical market models
4. Event studies
5. Univariate modelling of time series data
6. Models to explain volatility (ARCH and GARCH)
7. Estimation of the capital asset pricing model

Reading:
Alexander, C.: A Guide to Financial Data Analysis, Wiley.
Campbell, JY, Lo, AW, MacKinley, AC: The Econometrics of Financial Markets, Princeton University Press.
Geyer, A.: Information, Erwartung und Risiko. Aspekte der Verteilung, Abhängigkeit und Varianz von finanzwirtschaftlichen Zeitreihen, Verlag V. Florentz.
Hamilton, JD: Time Series Analysis, Princeton University Press.
Mills, T.: Econometric Modelling of Financial Time Series, Cambridge University Press.
Taylor, S.: Modelling Financial Time Series, Wiley.

Intended learning outcomes

Students have significant knowledge of the fundamentals, methods and concepts that are needed for the empirical analysis of financial market data. They can autonomously perform statistical test decisions with statistic programs such as R and critically analyze their economic importance. In addition, the students learn the independent handling of empirical capital market data and at the end of the course, they will have the ability to develop own functions and routines, for example for R.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places
--
Additional information
--
Workload
150 h
Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Microeconometrics			12-M-MIK-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course teaches basics, methods and concepts for the analysis of individual data. The scaling of observed data is adequately addressed. The maximum likelihood method, which is important for this type of data, is explained in detail.

Outline
1. What is microeconometrics?
2. Models for qualitatively dependent variables
3. Models for limited dependent variables
4. Time-dependent models

References
1. Greene, W. H.: Econometric Analysis, Philip Alan.
2. Ronning, G.: Microeconometrics, Springer Verlag.
3. Verbeek, M.: Modern Econometrics, Wiley.
4. Winkelmann, R., Boes, S.: Analysis of Microdata, Springer Verlag.

Intended learning outcomes

Students have significant knowledge of the maximum likelihood method and the most important models for qualitatively and limited dependent variables. They can autonomously perform estimations with statistic programs such as R and interpret the results meaningfully.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

--

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Empirical HR Research with Stata	12-M-EPF-161-m01

Module coordinator	Module offered by
holder of the Chair for Human Resource Management and Organisation	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The seminar "Empirische Personalforschung" ("Empirical Personnel Economics") introduces and discusses the most important estimation problems and their application in the software package STATA. In addition, students learn, with the help of basic problems of personnel economics, how estimation programs are programmed in STATA.
Reading list to be provided in class.

Intended learning outcomes

The aim of the seminar is to enable students to understand and apply the most important estimation programmes and their application in STATA with a focus on problems in personnel economics.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 10 pages)
Language of assessment: German and/or English
Assessment offered: Once a year as announced

Allocation of places

12 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)

Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Empirical Regional- and International Economic Research			12-M-ERA-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

No information on contents available.

Intended learning outcomes

No information on intended learning outcomes available.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 10 pages) on empirical analysis prepared by candidates or
c) portfolio (approx. 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Computational Economics - Advanced Level	12-M-NGM-161-m01

Module coordinator	Module offered by
holder of the Chair of Public Finance	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
This course will mostly be concerned with the analysis of public policy (in areas such as taxation, social security etc.). Providing students with state-of-the-art techniques for quantitative macroeconomic research in this very field and familiarising them with the relevant literature, this course will teach students how such policies redistribute between different generations and also within generations, how they may improve risk sharing when markets are incomplete and how they can trigger distortions and therefore hurt the aggregate economy.

Outline of syllabus:
1. Programming with FORTRAN and application of numerical methods
2. Solution techniques for dynamic programming problems
3. Policy analysis with stochastic growth and life cycle models

Reading:
Lecture notes will be provided.

Intended learning outcomes

After completing the course "Advanced Computational Economics" students will be able to
(i) edit and solve stochastic economic problems using advanced numerical techniques;
(ii) implement small scale economic models on the computer;
(iii) simulate tax and social security policy reforms and interpret the quantitative results in economic term.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Empirical Industrial Organization			12-M-EIO-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

1. (Recap of) Econometric methods
   - Ordinary Least Squares (OLS)
   - Endogeneity and how to deal with it (Instrumental Variables)
2. Estimation of demand
   - Representative consumer models
   - Multinomial Logit Model (ML) and extensions
   - Discrete choice models with individual data
   - Discrete choice models with aggregate data
3. Further applications
   - Demand and Supply estimation
   - Inferring marginal costs
   - Using structural models for counterfactual policy analysis

Intended learning outcomes

The students taking this class will learn modern empirical methods in studying questions related to industry outcomes. They will become familiar with methods used in estimating demand and during exercises will learn how one can implement these methods in practice using statistical software. The lectures will help students to have a thorough understanding of the so-called New Empirical Industrial Organization (NEIO) methodology. The students will become familiar with methods used in estimating demand and imperfect competition models among firms. They will learn how to use such models to infer marginal costs as well as constructing policy simulations based on the estimated models to evaluate the effects of changes in the competitive environment, such as mergers. A student that successfully completes this course will not only be able to read empirical academic papers but will also implement a few important models in computer exercises. Furthermore, students will be able to draw implications of empirical studies for economic policy in areas such as antitrust and regulation.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) written examination (questions concerning mathematical methodology; approx. 120 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Economic Order and Social Policy

(20 ECTS credits)

Compulsory

(10 ECTS credits)

Module title	Abbreviation
Labor Market Economics	12-M-OEA-161-m01

Module coordinator	Module offered by
holder of the Junior Professorship of Microeconomics, esp. Economics of Digitization	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This course provides an overview of the field of modern labor economics. The course will cover the following topics:
1. Labor supply
2. Labor demand
3. Human capital formation
4. Compensating wage differentials
5. Discrimination

The course will consist of frontal teaching of the basic theoretical as well as empirical tools as well as a careful reading of some of the key scientific articles related to the outlined topics. Students are expected to read the scientific articles in advance and will be asked to discuss them in small groups during class. In addition, a discussion of the articles will help illustrating how established scholars approach the core questions in modern labor economics and giving students an understanding of high quality empirical research.

The main reference for the lecture is Cahuc and Zylberberg. (2004): "Labor Economics", 1st edition, Massachusetts Institute of Technology. In addition, we will discuss well-published economic articles related to the single topics discussed in class.

Intended learning outcomes

The aim of this course is to acquaint students with classical as well as modern topics in labor economics and to encourage the development of research interest in this field. As such, the course's objective is to familiarize students with both the core theoretical models of labor economics as well as the main econometric methods used to provide empirical evidence.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Module title	Abbreviation
Theory of Social Policy	12-M-TSP-161-m01

Module coordinator	Module offered by
holder of the Chair of Labour Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This course offers an introduction to the fundamentals of causal inference and to widely used research designs in the social sciences. In the first part a framework for understanding causality is introduced. Specifically, the epistemological differences between association, intervention and counterfactuals are explained. Then it is shown why experiments are paramount in generating causal knowledge and which assumptions are needed for which level of the causal hierarchy. Finally, we will discuss two widely used approaches to causality in the social sciences, i.e. potential outcomes and directed acyclic graphs.

The second part is devoted to the research designs regressions analysis, difference-in-differences, instrumental variables, and regression discontinuity. The emphasis is how these research designs are for example applied to answer important questions in labour economics such as the effects of a minimum wage increase on employment or the effect of children on female labour supply and wages.

The assumptions each research design requires in order to identify a causal effect will be at center stage of the lecture. Therefore the emphasis is to teach students *what* one needs to estimate in order to answer a given question. Further, the research designs are discussed such that students will be able to evaluate and apply these research designs to other questions and fields.

Intended learning outcomes

At the end of the course, students should be able to understand basic concepts and methods of causal inference, as well as read, interpret, and assess the credibility of scientific publications. In addition, the course serves as preparation for advanced statistics and econometrics courses.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Compulsory Core Electives

(10 ECTS credits)

Module title			Abbreviation
Common European Labour Market			12-M-EW-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Labour Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Migration has become a key issue in the political and public debate all over the world. Thus, economists increasingly engaged in studying determinants and consequences of migration as it has a substantial impact on receiving and sending countries. This course offers an introduction to the key concepts of migration economics and will cover the following topics:

1) Migration Decision and Forms of Migration

2) Effects on Migration on Employment and Wages

3) Effects of Migration on Attitudes and Political Economy

4) Integration and Integration Policies

5) Refugee Migration

6) Impacts of Emigration

At the end of the course students are familiar with the basic theoretical and empirical concepts in the area of economics of migration. A special focus will be on the understanding of the identification of causal effects and the ability to connect links between the different areas of analysis.

The course will consist of frontal teaching of the basic theoretical as well as empirical tools as well as a careful reading of some of the key scientific articles related to the oulined topics (a reading list will be provided at the beginning of the semester). At the end of the semester, students will have the opportunity to present their term papers.

Intended learning outcomes

Solid background in Microeconomics and Econometrics is required.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

20 places. There are no restrictions with regard to available places for students of the Master's degree programmes Business Management, International Economic Policy or Economics, Wirtschaftsinformatik (Business Information Systems), Wirtschaftsmathematik (Mathematics for Economics) and Chinese and Economics as well as China Business and Economics. A total of 20 places will be allocated to students of other subjects; should the number of applications exceed the number of available places, these places will be allocated by lot.

Additional information

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Workload
150 h
Teaching cycle
Teaching cycle: after announcement
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016) Master's degree (1 major) Applied Human Geography (2017)

Module title			Abbreviation
Advanced Topics in Economic Policy			12-M-SPÜ-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Labour Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Sozialpolitische Übungen is from now on Experimental Economics

Intended learning outcomes

The discussion of current economic policy issues enables the students to gain a profound unterstanding of how economic and political markets function. Furthermore, autonomous use of research results in economic policy is fostered

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Social Insurance and the Welfare State			12-M-F3-161-m01

Module coordinator	Module offered by
holder of the Chair of Public Finance	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
This module discusses the economic justification for implementing social security systems in a market economy and provides students with deeper insights into this topic with the help of specific issues of public health and retirement policy.
Reading: lecture notes provided by Chair.

Contents:
1. Public intervention in insurance markets
2. The insurance function of social security
3. Social security and social morale
4. The optimal health insurance contract
5. Why do we need a public pension system?
6. Funding vs pay-as-you-go financing of public pensions

Intended learning outcomes

After completing the module "Theorie der Sozialversicherung" students are able to explain the theoretical foundation of the social security system in a market economy. Using simple partial equilibrium models they can discuss the financing and contract structure of the public health and pension system. Finally they are able to analyze the consequences of policy reforms.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Human Resource Management and Industrial Relations			12-M-HRM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair for Human Resource Management and Organisation		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The lecture "Human Resource Management and Industrial Relations" introduces advanced theories, estimation techniques and empirical results from the areas of human resources management and institutional frameworks such as the different actors in industrial relations.

Syllabus

Introduction: Human Resource Management & Industrial Relationships

Chapter 1: The employment contract [formal model]

Chapter 2: Motivation [formal model]

Chapter 3: Employee resistance against reorganisations [empirical study]

Chapter 4: The role of works councils [formal model]

Chapter 5: Works councils and the employer wage structure [empirical study]

Chapter 6: The behaviour of labour unions [formal model]

Chapter 7: Learning process of employers [formal model and empirical study]

Chapter 8: Demographic challenges of HRM [formal model and empirical study]

Intended learning outcomes

The aim of the lectures is to enable students to understand and apply advanced theories, estimation techniques and empirical results in the area human resource management and industrial relations on the basis of scientific literature.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

20 places. There are no restrictions with regard to available places for students of the Master's degree programmes Business Management, International Economic Policy or Economics, Wirtschaftsinformatik (Business Information Systems), Wirtschaftsmathematik (Mathematics for Economics) and Chinese and Economics as well as China Business and Economics. A total of 20 places will be allocated to students of other subjects; should the number of applications exceed the number of available places, these places will be allocated by lot.

Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016) Master's degree (1 major) Applied Human Geography (2017) Master's degree (1 major) Management (2018) Master's degree (1 major) International Economic Policy (2018) exchange program Business Management and Economics (2022)

Module title	Abbreviation
Incentives in Organizations	12-M-AO-161-m01

Module coordinator	Module offered by
holder of the Chair for Human Resource Management and Organisation	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Based on the classical principal-agent theory, this course discusses methodological and empirical aspects of incentives in organisations. It uses contents from advanced text books and original (mainly empirical) research articles.

Outline of syllabus

1. Principal-agent theory

2. Do top managers earn too much? (application)

3. Performance-based payment

4. Implementation of performance-based payment in companies (application)

5. Seniority payment (with application)

6. Financial incentives to work after retirement (with application)

7. Efficiency wages (with case study)

8. Team incentives (with case study)

Intended learning outcomes

Students acquire a working knowledge of key incentive models models, selected empirical applications and the necessary econometric background. This enables them to identify the advantages and disadvantages of different incentive systems that are applied in the enterprise context, to make informed management analyses and to critically evaluate current controversies and developments as well as to conduct their own research.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Work and Information			12-ITA-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module discusses relevant principles, concepts and applications of business information processing and its impact on organisational and process structures in today's business world.

Intended learning outcomes

The expertise gained from other modules related to business management issues can be interpreted and classified in a certain way by participating in this module. For decisions in regards to human resources planning, investment, and a company's strategy, the students will get to know all the relevant concepts and interdependencies, which come with taking information processing into account as the so called "fourth" factor of production.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) Information Systems (2022)

International Economics

(20 ECTS credits)

Compulsory

(10 ECTS credits)

Module title			Abbreviation
International Trade and the Multinational Firm			12-M-ITMF-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of International Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

The lecture starts out with theories of international trade based on comparative advantage (Ricardo and Heckscher-Ohlin) followed by theories based on monopolistic and oligopolistic competition to explain intra-industry trade. The final part covers firm heterogeneity and multinational firms. [If time permits the Armington model and the standard neoclassical model will be addressed.]

Outline

I Ricardian Trade Theory

II Heckscher-Ohlin Trade Theory

III New Trade Theory: Intra-Industry Trade, Increasing Returns to Scale, Imperfect Competition

IV Firm Heterogeneity, Trade and FDI

V The Multinational Firm

Literature:

The module draws heavily on articles from scholarly journals and handbooks. A detailed list of references with further references, notably journal articles, is provided with each chapter of the lecture. Material from the following books is also used:

Helpman, E. (2011). Understanding Global Trade. Princeton University Press.

Feenstra, R.C. (2016). Advanced International Trade. Theory and Evidence. Princeton University Press, Second Edition

Caves, R., R.W. Jones and J.A. Frankel (2007). World Trade and Payments. Addison Wesley

Bhagwati, J., A. Panagariya and T. N. Srinivasan (1998). Lectures on International Trade. Second Edition. MIT Press

Gandolfo, G. (1998). International Trade Theory and Policy. Springer-Verlag, Berlin and New York

Markusen, J.R., J.R. Melvin, W.H. Kaempfer, K. E. Maskus (1995). International Trade. McGrawHill

Barba Navaretti, G. and A.J. Venables (2004). Multinational Firms in the World Economy. Princeton University Press

Intended learning outcomes

The students acquire the ability to critically understand the causes and drivers of world trade and the developments of specialization patterns in the global economy. They learn to analyze, discuss and defend these developments and to apply the tools and methods to evaluate controversies associated with the ongoing deepening

of the international division of labor, in particular the repercussions of the global economy on national economies.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Module title			Abbreviation
Trade Policy and the World Trading System			12-M-TP-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of International Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

The module starts out with a sketch of key facts and the evolution of the world trading system as well as current trade policy controversies. The main part of the lecture deals with trade policy instruments (e.g. tariffs and quotas) and arguments in favor of trade policy interventions (the terms of trade, strategic trade policy, infant industries, industrial policy, environmental policy). Political economy issues are also addressed.

Outline

1 The evolution of the world trading system and current issues

2 Trade policy instruments and their effects under perfect competition

3 The competition effect of trade opening

4 Domestic distortions

5 International market power and trade policy

6 Political economy and the world trading system

Literatur:

The main text used is:

Helpman, E. und P.R. Krugman (1989). Trade Policy and Market Structure. The MIT Press, Cambridge, Massachusetts.

The following monographs cover the evolution of the world trading system and the evolution of ideas in trade policy making:

Bhagwati, J. (2002). Free Trade Today, Princeton University Press

Bhagwati, J. (2005). In Defense of Globalization. Oxford University Press

Irwin, D. (2020). Free Trade Under Fire, Princeton University Press, 5th Edition (as well as former editions partially containing further material)

Irwin, D. (1996). Against the Tide. An Intellectual History of Free Trade, Princeton University Press

Basic refreshers are

Krugman, P.R., M. Obstfeld und M. Melitz (2018), International Economics. Theory and Policy. Addison-Wesley, 11th Edition

Caves, R., R.W. Jones und J.A. Frankel (2007), World Trade and Payments. An Introduction. Addison-Wesley, 10th Edition

This literature is complemented by papers from scholarly journals.

Intended learning outcomes

Students acquire the ability to critically understand the effects and issues associated with the use of trade policy instruments. They are enabled to understand and evaluate the causes and consequences of interventions in international trade on the aggregate economy, producers and consumers, the foreign trading partners and the world trading system both analytically as well as in an intuitive manner. Students also acquire the scientific knowledge to grasp the factors determining the structure and dynamics of the world trading order.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Compulsory Core Electives

(10 ECTS credits)

Module title			Abbreviation
Advanced Macroeconomics			12-M-MFF-161-m01
Module coordinator			**Module offered by**
holder of the Chair of International Economics			Faculty of Management and Economics
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

The course covers long-run aspects of macroeconomics. We start with a review of the facts of long-run growth and a review of the Solow-growth model. The lecture then focuses on the infinite-horizon Ramsey-Cass-Koopmans model, on endogenous growth theory and it puts the roles of human capital and institutions under scrutiny. Applications of this framework involving urban and regional growth, resources and the environment will be taken up, time permitting.

Outline

I Facts and the Solow Growth Model

II Infinite-Horizon Ramsey-Cass-Koopmans model

III Endogenous Growth

IV Human Capital, Social Infrastructure and Beyond

V Applications (Urban and regional growth; Growth, resources and the environment)

Literature:

The course draws strongly on the textbook:

David Romer, Advanced Macroeconomics, 4th edition, McGraw-Hill Irwin.

We will use journal articles and research papers at several parts of the lecture.

Intended learning outcomes

Students acquire a working knowledge of the key models and analytical tools of advanced macroeconomics. This enables them to identify the key forces that determine the determinants of income levels and growth rates of incomes, to make informed policy analysis and statements and to critically evaluate current controversies and developments as well as to conduct their own research.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Economic Geography			12-M-EG-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of International Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

The lecture starts with a brief motivation of the core issues and a short overview over key forces driving the allocation of economic activity in space. The main parts of the lecture cover the functioning and evolution of cities and city systems, and the economic geography of regions and countries.

I Motivation and Facts

II Location Basics

- Forces Shaping the Location of Economic Activity in Space

- Some Intellectual Background

III Urban and Regional Economics

- The Spatial Structure of Cities

- City Systems

III New Economic Geography

- From the New Trade Theory to the New Economic Geography

- Footloose Capital Model and Policy Applications

- Core Periphery Models and Policy Applications

- Empirics

Literature:

The course uses a combination of textbooks and journal articles. Articles from the Handbook of Urban and Regional Economics (current and previous volumes) are heavily used. Useful books are:

Brakman, W., H. Garretsen and Ch. van Marrewijk, 2009, The New Introduction to Geographical Economics, Cambridge University Press

Baldwin, R., R. Forslid, P. Martin, G. Ottaviano and F. Robert-Nicoud, 2003, Economic Geography and Public Policy, Princeton, 2003

Combes, P.P, Th. Mayer and J.F. Thisse, 2008, Economic Geography. The Integration of Regions and Nations, Princeton University Press

Fujita, M., P.R. Krugman and A.J. Venables, 1999: The Spatial Economy, MIT Press

Fujita, M. and J.-F. Thisse (2013). Economics of Agglomeration. Cities, Industrial Location and Regional Growth. Cambridge University Press.

Krugman, P.R., 1991, Geography and Trade, MIT Press

Intended learning outcomes

Students acquire a knowledge of the forces which determine the allocation of economic activity in space and they learn to apply fundamental models of cities, city systems and of regional agglomerations to understand and analyze policy issues involving local, regional and international policy questions both analytically and in an economic intuitive way.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Monetary Policy, Foreign Exchange Markets, and the International Monetary System			12-M-EG2-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Monetary Economics and International Financial Markets		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course deals with the following topics:

The foreign exchange market:
Functioning of foreign exchange markets; market structure, players and evolution; FX transactions; hedging and speculation with FX.

Exchange rate economics:
Theoretical background and empirical validity of covered interest parity (CIP), uncovered interest rate parity (UIP) and purchasing power parity (PPP); Monetary approach: Flexible price monetary model and sticky price (Dornbusch-) overshooting model; Balassa-Samuelson effect; FX valuation via the PPP and the macroeconomic balance approach; Real effective exchange rates; Empirical validity of the exchange rate theories; Exchange rates and the current account.

Exchange rate regimes and monetary policy in open economies:
Classification of exchange rate regimes; the policy trilemma in open economies; historical development of the international monetary system; central bank interventions on the FX market.

Modelling open economy macroeconomics at the intermediate level:
Implications of the Mundell-Fleming model for monetary and fiscal policy under fixed and flexible exchange rates.
The BMW (IS-MP-PC) model of the open economy and its implication for monetary and fiscal policy under fixed and flexible exchange rates; optimum currency areas in the BMW model and in practice.

Currency crises:
International experience with currency crises since the 1970s; modelling currency crises within the Mundell-Fleming framework.

Managed-floating as a solution for the policy trilemma.

Intended learning outcomes

By completing this course, students receive a profound understanding of the functioning of foreign exchange markets, the drivers of exchange rate movements and some exchange rate valuation methods used in practice. Next to a profound knowledge of exchange rate theory the course highlights its practical applicability, e.g. as an investment strategy. In the second part of the course students learn the principles of monetary policy in open economies, including its trade-offs and risks like currency crises. Students will be able to analyze these issues based on theoretical models as well as the international historical experience.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)

Language of assessment: German and/or English

Allocation of places

30 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Module title			Abbreviation
European Macroeconomic Policy			12-M-EMP-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Monetary Economics and International Financial Markets		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

In particular, the course outline is as follows:

I. Targets of macroeconomic policy

II. The mechanics of the two core macroeconomic models

a. The classical model of a self-stabilizing corn economy

b. The Keynesian model of a monetary economy with inherent instability

c. The financial system and banks in the two models

III. The diverging policy implications of the two paradigms

a. Unemployment: wage rigidities versus rationing of the labor market by the goods market

b. Government debt: Crowding out versus Modern Monetary Theory (MMT)

c. Inflation: quantity theory versus Phillips curve

d. The incompatibility of the two worlds

IV. A simple IS/MP/PC model

V. The monetary policy of the ECB

a. The mandate of the ECB and possible trade-offs with unemployment and financial stability

b. Conventional/unconventional instruments of the ECB / The risk of fiscal dominance

c. ECB strategy and climate policy

d. The threat of deflation and the Zero-Lower Bound

VI. The difficult task of coordinating 19 independent national fiscal policies in the EMU

a. Specific challenges due to lack of political integration: Lack of coordination versus lack of fiscal discipline

b. The limitations set by Stability and Growth Pact

c. The rationale of fiscal rules: Maastricht Treaty, Fiscal Compact/Debt Brake, Golden Rule / reform proposals

VII. Specific EMU topics

a. Is the EMU an optimum currency area?

b. The financial crisis and the euro crisis: The dismal performance of the ECB until 2012 and the paradigm change by Mario Draghi ("Whatever it takes")

c. The ECB in the Corona crisis and Next Generation EU

Intended learning outcomes

By the end of the course, students will have gained a basic understanding of European macroeconomics.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

20 places. There are no restrictions with regard to available places for students of the Master's degree programmes Business Management, International Economic Policy or Economics, Wirtschaftsinformatik (Business Information Systems), Wirtschaftsmathematik (Mathematics for Economics) and Chinese and Economics as well as China Business and Economics. A total of 20 places will be allocated to students of other subjects; should the number of applications exceed the number of available places, these places will be allocated by lot.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Applied Human Geography (2017)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Module title			Abbreviation
European Competition Policy			12-M-WPE-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Outline of syllabus:
1. Legal environment, competition laws
2. Market definition
   - Qualitative methods
   - Simple quantitative methods
   - Hypothetical monopoly test
3. Horizontal agreements and collusion: repeated games and factors affecting likelihood of collusion
4. Horizontal mergers and collusion
   - Economic theory
   - Efficiency effects
   - Coordinated effects
5. Vertical relations and contracts
   - Economic analysis of contracts
   - "More economic approach"
6. Abuse of dominant position
   - Classification of abusive conduct
   - Economic analysis of abusive conduct and theory of harm

The course will be taught in English.

Intended learning outcomes

After completion of the module students can use the advanced concepts introduced in the lecture of competition policy, including the legal framework, the trace models and methods for the study of competition policy issues, as well as understand the approach of European competition policy in high profile cases. When they are confronted with practical problems, they can refer to these cases, and the same logic to practical examples apply by draining the relevant economic theories that identify variables to be measured and methodologies for assessing, and based on that adequate conclusions for appropriate cases. They will sufficiently understand the subject in order to open up that build upon literature in journals and being able to think critically.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. There are no restrictions with regard to available places for students of the Master's degree programmes Business Management, International Economic Policy or Economics, Wirtschaftsinformatik (Business Information Systems), Wirtschaftsmathematik (Mathematics for Economics) and Chinese and Economics as well as China Business and Economics. A total of 20 places will be allocated to students of other subjects; should the number of applications exceed the number of available places, these places will be allocated by lot.

Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) Media Communication (2016) Master's degree (1 major) China Language and Economy (2016) Master's degree (1 major) Applied Human Geography (2017) Master's degree (1 major) Media Communication (2018) Master's degree (1 major) Media Communication (2019)

Module title			Abbreviation
European Public Finance			12-M-EFP-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Public Finance		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course aims at introducing the main public finance issues in the European Union. Students will learn how the revenues of the Union are generated and how they are spent. We will discuss the motivation and implications of the Brexit decision and various coordination problems with respect to public debt, taxation and environmental policy. Economic policy is discussed with simple models, which highlight the central problems.

Course contents:

1. The European Union: History and Institutions

2. The Budget of the European Union

3. Economic Analysis of the Brexit Process

4. Sovereign Debt, Financial Crisis and Fiscal Integration in the EMU

5. Tax Competition or Tax Coordination in Europe?

6. European Climate Policy: Emission Trading and Green Deal

Intended learning outcomes

After completing the course students are introduced to the central public finance policy issues, institutions and rules of conduct in the EU. They are able to apply simple theoretical models to to discuss and analyze more specific policy problems.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

20 places. There are no restrictions with regard to available places for students of the Master's degree programmes Business Management, International Economic Policy or Economics, Wirtschaftsinformatik (Business Information Systems), Wirtschaftsmathematik (Mathematics for Economics) and Chinese and Economics as well as China Business and Economics. A total of 20 places will be allocated to students of other subjects; should the number of applications exceed the number of available places, these places will be allocated by lot.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Applied Human Geography (2017)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Module title	Abbreviation
Public Debt	12-M-F2-161-m01

Module coordinator	Module offered by
holder of the Chair of Public Finance	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
The module provides an introduction to some specific issues of public debt that are in the focus of the public and scientific debate.
Reading: lecture notes provided by Chair.

Outline of syllabus:
1. Measurement of public debt
2. Growth effects of public debt
3. Intergenerational effects of public debt
4. Public debt in open economies
5. Neutrality of public debt
6. Political economy of public debt
7. Theory of souvereign debtors

Intended learning outcomes

After completing the course "National Debt" students are able to distinguish and discuss the most important measurement concepts and problems of public debt. They can discuss the growth and distributional consequences using simple equilibrium models of closed and open economies. They can evaluate the relevance of Ricardian neutrality and know the political economny explanations of rising debt levels and debt overhangs in specific countries.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)

Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Econometrics 1			12-M-OE1-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This module deals with the basic concept and methodology of the ordinary least squares (OLS) regression model. In particular, model assumptions and properties are discussed and formally motivated. In addition, the module examines linear restrictions on the model's explanatory variables as well as dummy variables and introduces tests to verify simple and multiple linear restrictions.

Linear algebra is used as formal aid.

Outline of syllabus:
1. Random variables
2. Important distributions
3. Point estimates
4. Simple linear regression model
5. Model assumptions
6. Model properties
7. Simple hypothesis tests
8. Multiple linear regression model
9. Linear restrictions
10. Dummy variables
11. Multiple hypothesis tests

Intended learning outcomes

The students acquire knowledge of the basics, concepts and methods used in the classical linear regression model and understand the role of econometrics in science and data analysis. In particular, they learn how to analytically derive, calculate and interpret the coefficients, standard errors and p-values of a classic regression output of the multiple regression model. Furthermore, they are able to formally state and motivate the assumptions and properties of OLS and know how to deal with transformed and dummy variables. Additionally, students will be able to test multiple linear restrictions on the parameters and will be able to apply these tests to real economic, business and social science questions.
The competences acquired in this course serve as a prerequisite for "Econometrics II", "Econometrics III", "Microeconometrics" und "Financial Econometrics".

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: each semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Common European Labour Market			12-M-EW-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Labour Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Migration has become a key issue in the political and public debate all over the world. Thus, economists increasingly engaged in studying determinants and consequences of migration as it has a substantial impact on receiving and sending countries. This course offers an introduction to the key concepts of migration economics and will cover the following topics:

1) Migration Decision and Forms of Migration

2) Effects on Migration on Employment and Wages

3) Effects of Migration on Attitudes and Political Economy

4) Integration and Integration Policies

5) Refugee Migration

6) Impacts of Emigration

At the end of the course students are familiar with the basic theoretical and empirical concepts in the area of economics of migration. A special focus will be on the understanding of the identification of causal effects and the ability to connect links between the different areas of analysis.

The course will consist of frontal teaching of the basic theoretical as well as empirical tools as well as a careful reading of some of the key scientific articles related to the oulined topics (a reading list will be provided at the beginning of the semester). At the end of the semester, students will have the opportunity to present their term papers.

Intended learning outcomes

Solid background in Microeconomics and Econometrics is required.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

20 places. There are no restrictions with regard to available places for students of the Master's degree programmes Business Management, International Economic Policy or Economics, Wirtschaftsinformatik (Business Information Systems), Wirtschaftsmathematik (Mathematics for Economics) and Chinese and Economics as well as China Business and Economics. A total of 20 places will be allocated to students of other subjects; should the number of applications exceed the number of available places, these places will be allocated by lot.

Additional information

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Workload
150 h
Teaching cycle
Teaching cycle: after announcement
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016) Master's degree (1 major) Applied Human Geography (2017)

Module title			Abbreviation
Empirical Regional- and International Economic Research			12-M-ERA-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

No information on contents available.

Intended learning outcomes

No information on intended learning outcomes available.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 10 pages) on empirical analysis prepared by candidates or
c) portfolio (approx. 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Topics in International Economics 1			12-M-ATIÖ1-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

Current topics in international economics and economic geography [e.g. Urbanization and Inequality; Tasks, Trade, and Cities; Outsourcing, Offshoring and Multinational Firms; Competition of Locations, Jurisdictions and Systems; Globalization and the Environment; Trade, Multinational Firms and Labor Markets; Triumph of the City]

Literature:

Peer-reviewed articles and/or monographs.

Intended learning outcomes

Drawing on current cutting-edge research, students are enabled to analyze current research questions and to learn and apply research methods. The seminar style of the course teaches them to present their own seminar papers and research both in written and in oral form. Students are enabled to critically analyze and discuss the work of their peers.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively WS instead of V + Ü

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages) or
c) portfolio (approx. 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)

Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Topics in International Economics 2			12-M-ATIÖ2-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

Current topics in international economics and economic geography [e.g. Urbanization and Inequality; Tasks, Trade, and Cities; Outsourcing, Offshoring and Multinational Firms; Competition of Locations, Jurisdictions and Systems; Globalization and the Environment; Trade, Multinational Firms and Labor Markets; Triumph of the City]

Literature:

Peer-reviewed articles and/or monographs.

Intended learning outcomes

Drawing on current cutting-edge research, students are enabled to analyze current research questions and to learn and apply research methods. The seminar style of the course teaches them to present their own seminar papers and research both in written and in oral form. Students are enabled to critically analyze and discuss the work of their peers.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively WS instead of V + Ü

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages) or
c) portfolio (approx. 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)

Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Topics in International Economics 3			12-M-ATIÖ3-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

Current topics in international economics and economic geography [e.g. Urbanization and Inequality; Tasks, Trade, and Cities; Outsourcing, Offshoring and Multinational Firms; Competition of Locations, Jurisdictions and Systems; Globalization and the Environment; Trade, Multinational Firms and Labor Markets; Triumph of the City]

Literature:

Peer-reviewed articles and/or monographs.

Intended learning outcomes

Drawing on current cutting-edge research, students are enabled to analyze current research questions and to learn and apply research methods. The seminar style of the course teaches them to present their own seminar papers and research both in written and in oral form. Students are enabled to critically analyze and discuss the work of their peers.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively WS instead of V + Ü

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages) or
c) portfolio (approx. 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)

Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Advanced Microeconomics			12-M-AM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair for Economics, Contract Theory and Information Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

In a nutshell, microeconomic theory considers the behavior of individual economic agents and builds from this foundation to a theory of aggregate economic outcomes, which then can be applied for conducting welfare analysis and giving policy advice. This lecture addresses the core building block of this thought complex: individual decision making and behavior. Specifically, students will come to understand in detail the standard models of riskless consumer choice, choice under risk and intertemporal choice and learn about the empirical challenges and limitations of these models.

Throughout the lecture, we will work with precise mathematical formalizations of the ideas that we want to think and talk about. In consequence, a solid understanding of the mathematical toolbox of standard microeconomics (e.g., differential calculus and constrained optimization; basic set theory; integration by parts) will be helpful as it will allow to focus on the underlying economic intuition. However, every required mathematical concept will be introduced and explained along the way, such that a strong interest in formal economic analysis is more important than an advanced mathematical background.

The exposition is primarily based on the standard graduate textbooks

- Mas-Colell, Whinston and Green (1995): "Microeconomic Theory"
- Jehle and Reny (2001): "Advanced Microeconomic Theory"

Intended learning outcomes

After completing the course students will be able to
- explain essential findings of microeconomic theory,
- apply the involved methods to given stylized examples on their own,
- recognize in which real life situations and how the results can be applied.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) written examination (questions concerning mathematical methodology; approx. 120 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Entrepreneurship and Management

(20 ECTS credits)

Compulsory

(10 ECTS credits)

Module title			Abbreviation
Entrepreneurship and Management 1			12-M-UGF1-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Entrepreneurship and Strategy		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module is a theory-led and practice-oriented primer on corporate entrepreneurship. It provides you with knowledge useful for anyone aiming at working (or researching) in the field of corporate innovation and entrepreneurship or at pursuing an 'intrapreneurial' or entrepreneurial career.

(1) Introduction to corporate entrepreneurship

(2) Antecedents and forms of corporate entrepreneurship

(3) Corporate strategy and corporate entrepreneurship

(4) Organizational structure and corporate entrepreneurship

(5) Human resource management and corporate entrepreneurship

(6) Building supportive organizational cultures

(7) Entrepreneurial control systems

(8) Entrepreneurial leadership

(9) The corporate entrepreneur as a champion and diplomat

(10) The pay-off from corporate entrepreneurship

(11) Corporate venture capital

(12) Corporate entrepreneurship in nonprofit and government organizations

(13) Universities and academic spin-offs

(14) Wrap-up and Q&A

Intended learning outcomes

Educational aims

- Clarify the role of corporate entrepreneurship
- Explain theoretical concepts and mechanisms behind corporate entrepreneurship
- Enable students to critically appraise alternative approaches to corporate entrepreneurship
- Enable students to evaluate the boundaries and risks of corporate entrepreneurship

Learning outcomes

On successful completion of this module students will be able to:

- Create and evaluate concepts related to corporate entrepreneurship
- Assess the role of corporate entrepreneurship for creating and sustaining competitive advantage
- Make judgements about the organizational and managerial implications of corporate entrepreneurship
- Systematically choose between different routes of action

Courses (type, number of weekly contact hours, language — if other than German)
V (2) + Ü (2)
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)
a) written examination (approx. 60 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) presentation (approx. 30 minutes) and written elaboration (10 to 15 pages) or d) term paper (15 to 20 pages) or e) portfolio (maximum 20 pages) Language of assessment: German and/or English
Allocation of places
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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Entrepreneurship and Management 2			12-M-UGF2-161-m01

Module coordinator	Module offered by
holder of the Chair of Entrepreneurship and Strategy	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This theory-led and application-oriented module provides you with critical knowledge and skills related to corporate strategy—essential for anyone aspiring to take on leadership roles in their future career, may it be in the private or public sector. The module goes beyond basic knowledge about strategic management provided by bachelor-level modules.

(1) Developing strategies in pursuit of competitive advantage

(2) Corporate diversification

(3) Vertical integration and outsourcing

(4) Mergers & acquisitions

(5) Dynamic strategies

(6) Cooperative strategies

(7) Corporate spin-offs and spin-outs

(8) Internationalization strategies (I)

(9) Internationalization strategies (II)

(10) Strategic change

(11) Corporate strategies and new technologies

(12) Corporate governance and corporate social responsibility

(13) Corporate communication and crisis management

(14) Wrap-up and Q&A

Intended learning outcomes

Educational aims

- Clarify the role of corporate strategy
- Explain theoretical concepts and mechanisms behind corporate strategy
- Enable students to critically appraise alternative approaches to corporate strategy
- Enable students to evaluate the boundaries and risks of corporate strategy

Learning outcomes

On successful completion of this module students will be able to:

- Assess the role of corporate strategy for creating and sustaining competitive advantage
- Create and evaluate concepts related to corporate strategy
- Make judgements about the organizational and managerial implications of corporate strategy

- Systematically choose between different routes of action

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination of one candidate each (approx. 30 minutes) or
c) presentation (approx. 30 minutes) and written elaboration (10 to 15 pages) or
d) term paper (15 to 20 pages) or
e) portfolio (maximum 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Compulsory Core Electives

(10 ECTS credits)

Module title			Abbreviation
Employment Law			12-M-AFW-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
2 semester	graduate	--	

Contents

Contents: employment and labour law and works constitution law incl. collective agreement law

Employment and Labour law

Legal sources of employment and labour law

Definitions, employment and labour law, employees

The employment contract

- Job application, permissible and impermissible questions in job interviews, consequences of lying, contesting the employment contract
- General Equal Treatment Act, claims for damages by applicants
- Conclusion of an employment contract, form, evidence under the Law of Proof of Substantial Conditions Applicable to the Employment Relationship
- Contents of the employment contract, company practice, overall commitment, reservation of the right of voluntariness and revocation
- General terms and conditions of business and control of terms and conditions of employment, invalid clauses and their consequences
- Limitation of the term of the employment contract, fixed term employment contracts

Rights and duties arising from the employment relationship

- Primary and secondary duties
- Employer's right to issue instructions, permissible and impermissible instructions
- Sickness, obligations to report and provide evidence under the Continued Remuneration Act
- Secondary employment, prohibition of competition, duty of confidentiality, occupational health and safety
- Granting of holiday leave
- Continued payment of wages in the event of illness, restrictions

Severe disability, special rights and protection against dismissal

Working hours and the Working Hours Act

The warning, formal and material requirements, consequences

Termination of employment

- Termination agreement
- Termination of employment
- Formal requirements
- Ordinary and extraordinary termination by the employer
- Behavioral termination
- Person-related (illness-related) dismissal

- Dismissal for operational reasons
- Special protection against dismissal

Works constitution law incl. collective bargaining law

Legal sources of works constitution law

Definitions, company, works council, employee

The works council and its role

- Works council elections
- Start, end, duration of term of office
- Legal status of members, honorary office, leave of absence, special protection against dismissal
- Entitlement for training, works council costs
- Works meetings
- General works council, group works council, youth/apprentice representation

Material co-determination of the works council, participation

- Information rights (access to gross pay roll, expert advice)
- Consultation rights (consultation before each dismissal, right to object)
- Consultation rights (involvement of the economic committee, changes in operations)

Co-determination in the narrower sense

- Rights of consent and objection (staff questionnaire, selection guidelines, recruitment, transfers)
- Refusal of consent, legal proceedings Substitution of consent

Co-determination rights

- Enforceable co-determination, conciliation board, composition, procedure, decision
- Mandatory co-determination rights of works council, e.g. regarding
- Conduct of the workplace (smoking and alcohol bans, formalized sick leave talks, occupational integration management)
- Working hours, breaks, shift and flexi-time models, overtime, short-time work
- Holidays, company holidays
- Technical equipment for monitoring (time recording, access systems, video surveillance, telephone and internet use, skills database)
- Occupational health and safety
- Social facilities (canteen, company kindergarten)
- Company wage structure, remuneration (piece rates, bonuses)
- Company changes, reconciliation of interests and social plan

Collective bargaining law

Definition, contractual and normative part, legal effect

Application of collective agreements, parties of collective agreements

Dynamic and static clauses referring to a collective agreement

Collective agreement and company agreements, blocking effect of collective agreement

Collective arbitration board in cases of compulsory works council co-determination

Intended learning outcomes

At the end of this course, students will have the following competences:

Students gain solid basic knowledge of employment and labour law, the works council and its tasks and an overview of collective agreement law. At the same time, methodically and substantively sound legal knowledge is conveyed and practical relevance is established with case studies and current case law.

By working on an exam in the form of a legal opinion, the students are taught to solve a demanding legal issue with legal problems in a given time. Within a narrow thematic field and a time-limited framework, they are able to work on a legal issue in a well-founded and largely independent manner.

Within the framework of the term paper on a judgement of the Federal Labour Court, the students deal with a concrete case and the case law of the highest German labour court. They are familiarised with the methods of legal work and are enabled to work independently in a problem-solving manner. In addition to understanding the facts of the case and the legal problems, they will focus primarily on the consequences of the judgement for their practice. Here, the legal knowledge imparted will be implemented with a practical approach and the opportunity to creatively develop their own recommendations on how to deal with the judgement. In addition, the students present the case and their own conclusions for practice. In the group discussion, the other students have the opportunity to gather further knowledge and actively participate in the exchange of opinions on current judgements and case law.

The knowledge imparted is relevant for a wide range of professional fields of activity and is especially valuable for students who will work in the field of human resources or are interested in the field of employee management.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

[a) written examination (approx. 120 minutes) and b) talk (approx. 30 minutes), weighted 3:2] or
[a) written examination (approx. 120 minutes) and c) presentation (approx. 15 minutes) and d) written elaboration of presentation (approx. 10 pages), weighted 3:1:1]

Allocation of places

30 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)

Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Advanced Microeconomics			12-M-AM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair for Economics, Contract Theory and Information Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

In a nutshell, microeconomic theory considers the behavior of individual economic agents and builds from this foundation to a theory of aggregate economic outcomes, which then can be applied for conducting welfare analysis and giving policy advice. This lecture addresses the core building block of this thought complex: individual decision making and behavior. Specifically, students will come to understand in detail the standard models of riskless consumer choice, choice under risk and intertemporal choice and learn about the empirical challenges and limitations of these models.

Throughout the lecture, we will work with precise mathematical formalizations of the ideas that we want to think and talk about. In consequence, a solid understanding of the mathematical toolbox of standard microeconomics (e.g., differential calculus and constrained optimization; basic set theory; integration by parts) will be helpful as it will allow to focus on the underlying economic intuition. However, every required mathematical concept will be introduced and explained along the way, such that a strong interest in formal economic analysis is more important than an advanced mathematical background.

The exposition is primarily based on the standard graduate textbooks

- Mas-Colell, Whinston and Green (1995): "Microeconomic Theory"
- Jehle and Reny (2001): "Advanced Microeconomic Theory"

Intended learning outcomes

After completing the course students will be able to
- explain essential findings of microeconomic theory,
- apply the involved methods to given stylized examples on their own,
- recognize in which real life situations and how the results can be applied.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) written examination (questions concerning mathematical methodology; approx. 120 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Strategic Networks in Industry	12-M-MS-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The primary object of this course is to gain a detailed understanding of strategic networks and of the phenomenon of clustering in the industrial industry. The example of the international automotive industry is used for clarification of the theoretical contents.
The focus is on marketing in industrial companies and also on CSR - CSR is considered the "driver" of sustainable innovations - as well as the different strategy types of sustainable innovations.
Outline of syllabus:
1. Strategic networks and clusters in industrial industries such as the automotive industry
2. Transaction types of Williamson as well as strategic cooperation between automobile manufacturers and suppliers
3. Management of business types, in particular the business of suppliers in the automotive industry
4. Cluster and entrepreneurship activities
5. Sustainable innovation strategies

Intended learning outcomes

By the end of the course, students gain a profound understanding above the basics of network research. Furthermore students will aquire sectoral knowledge of the automotive industry as well as detailed cluster skills.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)

Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)

Module title			Abbreviation
Incentives in Organizations			12-M-AO-161-m01
Module coordinator			**Module offered by**
holder of the Chair for Human Resource Management and Organisation			Faculty of Management and Economics
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Based on the classical principal-agent theory, this course discusses methodological and empirical aspects of incentives in organisations. It uses contents from advanced text books and original (mainly empirical) research articles.

Outline of syllabus

1. Principal-agent theory

2. Do top managers earn too much? (application)

3. Performance-based payment

4. Implementation of performance-based payment in companies (application)

5. Seniority payment (with application)

6. Financial incentives to work after retirement (with application)

7. Efficiency wages (with case study)

8. Team incentives (with case study)

Intended learning outcomes

Students acquire a working knowledge of key incentive models models, selected empirical applications and the necessary econometric background. This enables them to identify the advantages and disadvantages of different incentive systems that are applied in the enterprise context, to make informed management analyses and to critically evaluate current controversies and developments as well as to conduct their own research.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Entrepreneurship and Management 3			12-M-UGF3-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Entrepreneurship and Strategy		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module provides an introduction into digital entrepreneurship and digital transformation.

(1) Introduction

(2) Digital business models

(3) Identifying and exploiting opportunities for digital entrepreneurship

(4) Strategies for creating competitive advantage in digital entrepreneurship

(5) Digital marketing for entrepreneurs

(6) Crowdfunding for entrepreneurs

(7) Design thinking

(8) Lean startup

(9) Platform ecosystems and online communities

(10) Digital strategy and digital transformation

(11) The agile organization

(12) Crowdsourcing

(13) Cyberfraud

(14) Wrap-up and Q&A

Intended learning outcomes

Educational aims

- Clarify the role of digital entrepreneurship and digital transformation
- Explain theoretical concepts and mechanisms behind digital entrepreneurship and digital transformation
- Enable students to critically appraise alternative approaches to digital entrepreneurship and digital transformation
- Enable students to evaluate the boundaries and risks of digital entrepreneurship and digital transformation

Learning outcomes

On successful completion of this module students will be able to:

- Assess the role of digital entrepreneurship and digital transformation for creating and sustaining competitive advantage
- Create and evaluate concepts related to digital entrepreneurship and digital transformation

- Make judgements about the organizational and managerial implications of digital entrepreneurship and digital transformation
- Systematically choose between different routes of action

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination of one candidate each (approx. 30 minutes) or
c) presentation (approx. 30 minutes) and written elaboration (10 to 15 pages) or
d) term paper (15 to 20 pages) or
e) portfolio (maximum 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Entrepreneurship and Management 4			12-M-UGF4-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module serves the purpose of transferring credits from
- courses taken at other German or non-German universities
- additional courses offered on a short-term basis
- courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions)

The holders of the respective Chairs will ensure that the courses are eligible for credit transfer.

Intended learning outcomes

Due to the crediting of different modules, no competence description can be made.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination of one candidate each (approx. 30 minutes) or
c) presentation (approx. 30 minutes) and written elaboration (10 to 15 pages) or
d) term paper (15 to 20 pages) or
e) portfolio (maximum 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
IT-Management			12-M-ITM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Information Systems Engineering		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content:
This course provides students with an in-depth overview of aims, tasks and appropriate methods of IT management.

Outline of syllabus:
1. Organisation and distinction
2. IT strategy
3. IT organisation
4. Management of IT systems
5. Enterprise Architecture Management
6. IT project management
7. IT security
8. IT law
9. IT controlling

Reading:

- Hofmann/Schmidt: Masterkurs IT-Management, Wiesbaden.
- Tiemeyer: Handbuch IT-Management, Munich.
- Hanschke: Strategisches Management der IT-Landschaft, Munich.

Intended learning outcomes

After completing the course "IT Management", students will be able to
1. overview the different aspects to be considered regarding a purposeful IT management;
2. understand and apply appropriate methods and tools;
3. independently perform system search and selection in a team project (only after participation in the practice lessons).

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload
150 h
Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016) Master's degree (1 major) Management (2018) Master's degree (1 major) International Economic Policy (2018) Master's degree (1 major) China Business and Economics (2019) Master's degree (1 major) China Language and Economy (2019) Master's degree (1 major) Information Systems (2019) Master's degree (1 major) China Business and Economics (2021) Master's degree (1 major) China Language and Economy (2021) Master's degree (1 major) Economathematics (2021) Master's degree (1 major) Information Systems (2022) Master's degree (1 major) International Economic Policy (2022) Master's degree (1 major) Management (2022) Master's degree (1 major) Economathematics (2022) exchange program Business Management and Economics (2022)

Module title			Abbreviation
Economics of Information and Network Industries			12-M-EIN-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Outline of syllabus:
1. Network effects
   - Consumer demand in markets with network effects and rational expectations
   - Monopoly pricing
   - Competition in markets with network effects
   - Compatibility and multihoming
   - Dynamic competition
   - Competition policy issues in industries with network effects
2. Competition in markets with switching costs
   - Simple two period models of markets with switching costs
   - Various modelling possibilities for switching costs
   - Switching costs and long-run prices
3. Two(Multi)-Sided Markets and Platforms
   - Monopoly pricing in platform markets
   - Competition in platform markets
   - Divide and conquer strategies
   - Non-price strategies
   - Competition policy issues in platform markets
4. Access pricing in network industries
   - Network competition and role of access prices
   - Regulation of access prices

The course will be taught in English.

Intended learning outcomes

After completion of the module students can understand and explain themselves the in the lecture introduced advanced concepts of economics, information and network industries (including their mathematical representation form). They will be able to refer to the modeling examples from the practice by impute obvious corporate strategies and can predict the market outcome, evaluate information and network industries from the perspective of the state and, if necessary, appropriate policy action alternatives derived. They will sufficiently understand the subject in order to open up that build upon literature in journals and being able to think critically.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) written examination (questions concerning mathematical methodology; approx. 120 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: no courses offered
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
E-Business Strategies			12-M-IBS-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Information Systems Engineering		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The module provides an overview of strategic implications of digital technologies at the level of organisations, industries and value networks. To this end, concepts and frameworks from strategic technology management are applied to digital innovations and illustrated with numerous examples. In the accompanying exercise, case studies of well-known digital companies and their business models are analysed and discussed.

Intended learning outcomes

- Understand theoretical concepts of strategy development and implementation in the context of digital technologies.

- Apply different frames of reference and understand their strengths and weaknesses in the context of practical application.

- Transfer the concepts to real business situations

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places. Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Research Methods

(20 ECTS credits)

Compulsory Core Electives I

(15 ECTS credits)

Module title			Abbreviation
Advanced Microeconomics			12-M-AM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair for Economics, Contract Theory and Information Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

In a nutshell, microeconomic theory considers the behavior of individual economic agents and builds from this foundation to a theory of aggregate economic outcomes, which then can be applied for conducting welfare analysis and giving policy advice. This lecture addresses the core building block of this thought complex: individual decision making and behavior. Specifically, students will come to understand in detail the standard models of riskless consumer choice, choice under risk and intertemporal choice and learn about the empirical challenges and limitations of these models.

Throughout the lecture, we will work with precise mathematical formalizations of the ideas that we want to think and talk about. In consequence, a solid understanding of the mathematical toolbox of standard microeconomics (e.g., differential calculus and constrained optimization; basic set theory; integration by parts) will be helpful as it will allow to focus on the underlying economic intuition. However, every required mathematical concept will be introduced and explained along the way, such that a strong interest in formal economic analysis is more important than an advanced mathematical background.

The exposition is primarily based on the standard graduate textbooks

- Mas-Colell, Whinston and Green (1995): "Microeconomic Theory"
- Jehle and Reny (2001): "Advanced Microeconomic Theory"

Intended learning outcomes

After completing the course students will be able to
- explain essential findings of microeconomic theory,
- apply the involved methods to given stylized examples on their own,
- recognize in which real life situations and how the results can be applied.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) written examination (questions concerning mathematical methodology; approx. 120 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Advanced Macroeconomics			12-M-MFF-161-m01
Module coordinator			**Module offered by**
holder of the Chair of International Economics			Faculty of Management and Economics
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

The course covers long-run aspects of macroeconomics. We start with a review of the facts of long-run growth and a review of the Solow-growth model. The lecture then focuses on the infinite-horizon Ramsey-Cass-Koopmans model, on endogenous growth theory and it puts the roles of human capital and institutions under scrutiny. Applications of this framework involving urban and regional growth, resources and the environment will be taken up, time permitting.

Outline

I Facts and the Solow Growth Model

II Infinite-Horizon Ramsey-Cass-Koopmans model

III Endogenous Growth

IV Human Capital, Social Infrastructure and Beyond

V Applications (Urban and regional growth; Growth, resources and the environment)

Literature:

The course draws strongly on the textbook:

David Romer, Advanced Macroeconomics, 4th edition, McGraw-Hill Irwin.

We will use journal articles and research papers at several parts of the lecture.

Intended learning outcomes

Students acquire a working knowledge of the key models and analytical tools of advanced macroeconomics. This enables them to identify the key forces that determine the determinants of income levels and growth rates of incomes, to make informed policy analysis and statements and to critically evaluate current controversies and developments as well as to conduct their own research.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Managerial Analytics & Decision Making			12-M-MADM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Logistics and Quantitative Methods		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course "Managerial Analytics & Decision Making" discusses quantitative methods to structure and solve a diverse set of management problems and demonstrates the application of modern methods with the help of multiple case studies.

Intended learning outcomes

After completing this course students can
(i) better understand and structure problems;
(ii) apply important theoretical and empirical frameworks to practical problems that evaluate good and bad decision making;
(iii) implement advanced analytical methods to support decision making under risk.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Econometrics 1			12-M-OE1-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This module deals with the basic concept and methodology of the ordinary least squares (OLS) regression model. In particular, model assumptions and properties are discussed and formally motivated. In addition, the module examines linear restrictions on the model's explanatory variables as well as dummy variables and introduces tests to verify simple and multiple linear restrictions.

Linear algebra is used as formal aid.

Outline of syllabus:
1. Random variables
2. Important distributions
3. Point estimates
4. Simple linear regression model
5. Model assumptions
6. Model properties
7. Simple hypothesis tests
8. Multiple linear regression model
9. Linear restrictions
10. Dummy variables
11. Multiple hypothesis tests

Intended learning outcomes

The students acquire knowledge of the basics, concepts and methods used in the classical linear regression model and understand the role of econometrics in science and data analysis. In particular, they learn how to analytically derive, calculate and interpret the coefficients, standard errors and p-values of a classic regression output of the multiple regression model. Furthermore, they are able to formally state and motivate the assumptions and properties of OLS and know how to deal with transformed and dummy variables. Additionally, students will be able to test multiple linear restrictions on the parameters and will be able to apply these tests to real economic, business and social science questions.
The competences acquired in this course serve as a prerequisite for "Econometrics II", "Econometrics III", "Microeconometrics" und "Financial Econometrics".

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: each semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Compulsory Core Electives II

(ECTS credits)

Module title	Abbreviation
DSGE Modelling	12-M-DMM-161-m01

Module coordinator	Module offered by
head of the Work Group of Empirical Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course offers an introduction to "Dynamic Stochastic General Equilibrium Modelling" (DSGE). These models are designed to describe the business cycle at the macro level. In a first step, we analyse the behaviour of a representative household. In particular, we describe how consumption, asset allocation and labour supply plans are formulated. In a second step, we focus on the firm sector and address how firms solve for optimal production plans. In a third step, we explain what role the central bank plays in stabilising the business cycle. Thereby, we show how changes in interest rates interact with optimal decisions taken by households and firms.
We also discuss hot topics such as CAPM models and monetary policy in the euro area.

Intended learning outcomes

The course offers analytical tools designed to solve DSGE models. These analytical skills encompas:

- Solving of intertemporal optimization problems (e.g., consumption Euler-equations).
- Linearization methods (e.g., Taylor-expansions).
- Solving linear difference expectations by minimum state variabel techniques (MSV-solution).
- Basic time series concepts such as impilse response functions, variance decompositions.
- Basic insights in MATLAB/ Dynare programming: specifying, solving and estimating DSGE models.

Based on the course students are able themselves to design and implement DSGE models.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Microeconometrics			12-M-MIK-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course teaches basics, methods and concepts for the analysis of individual data. The scaling of observed data is adequately addressed. The maximum likelihood method, which is important for this type of data, is explained in detail.

Outline
1. What is microeconometrics?
2. Models for qualitatively dependent variables
3. Models for limited dependent variables
4. Time-dependent models

References
1. Greene, W. H.: Econometric Analysis, Philip Alan.
2. Ronning, G.: Microeconometrics, Springer Verlag.
3. Verbeek, M.: Modern Econometrics, Wiley.
4. Winkelmann, R., Boes, S.: Analysis of Microdata, Springer Verlag.

Intended learning outcomes

Students have significant knowledge of the maximum likelihood method and the most important models for qualitatively and limited dependent variables. They can autonomously perform estimations with statistic programs such as R and interpret the results meaningfully.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Analysis of Financial Market Data			12-M-FMO-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
The module covers the fundamentals, methods and concepts for the empirical analysis of financial market data. The concept of market efficiency is explained and critically examined with reference to the random walk hypothesis. To test this hypothesis, a number of parametric and non-parametric methods are proposed and applied in practice. Based on the findings, market microstructure models that can explain some important empirical findings will be discussed. In addition, the course describes event studies for testing the significant impact of corporate news on the share price and discusses issues of univariate time series analysis such as AR(I)MA and ARCH / GARCH models that are indispensable for modelling financial market data. In the final part of the course, CAPM is discussed and examined, in particular with regard to its empirical applicability.

Syllabus:
1. Information efficiency
2. Random walk
3. Theoretical market models
4. Event studies
5. Univariate modelling of time series data
6. Models to explain volatility (ARCH and GARCH)
7. Estimation of the capital asset pricing model

Reading:
Alexander, C.: A Guide to Financial Data Analysis, Wiley.
Campbell, JY, Lo, AW, MacKinley, AC: The Econometrics of Financial Markets, Princeton University Press.
Geyer, A.: Information, Erwartung und Risiko. Aspekte der Verteilung, Abhängigkeit und Varianz von finanzwirtschaftlichen Zeitreihen, Verlag V. Florentz.
Hamilton, JD: Time Series Analysis, Princeton University Press.
Mills, T.: Econometric Modelling of Financial Time Series, Cambridge University Press.
Taylor, S.: Modelling Financial Time Series, Wiley.

Intended learning outcomes

Students have significant knowledge of the fundamentals, methods and concepts that are needed for the empirical analysis of financial market data. They can autonomously perform statistical test decisions with statistic programs such as R and critically analyze their economic importance. In addition, the students learn the independent handling of empirical capital market data and at the end of the course, they will have the ability to develop own functions and routines, for example for R.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places
--
Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Theory of Industrial Organization 1			12-M-TI1-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Theory of industrial organisation:
1. Monopoly pricing
   - Nonlinear pricing and mechanism design
   - Dynamic pricing: experience goods, durable goods
2. Oligopoly pricing
   - Static price and quantity competition in homogeneous and differentiated goods markets
   - Comparative statics
   - Equilibrium market structure
3. Dynamic competition in oligopoly markets
   - Subgame perfect equilibrium and models of dynamic competition
   - Repeated games and collusion
4. Strategic behaviour by incumbent firms
   - Entry deterrence and predation
   - Signalling and reputation
5. Behavioral Industrial Organization
   - Reference Dependent Preferences and Framing Effects
   - Time inconsistent behavior

The course will be taught in English.

Intended learning outcomes

Students which complete this class will acquire a working knowledge of advanced theoretical models of competition in oligopoly markets as well as sophisticated pricing techniques in monopoly markets. They will learn the conditions under which the predictions of these models are valid. They will become familiar with applications of advanced game theoretic tools, such as dynamic models of competition, for studying interactions between firms in markets. By means of comprehensive exercises, they will apply the methods they learn in class to practically relevant problems. They will be in a position to read academic papers on related topics, assess the strengths and weaknesses of an approach, summarize and comment on these papers and suggest possible extensions.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload
150 h
Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Theory of Industrial Organization 2			12-M-TI2-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This course discusses vertical contracts in supply chains and their impact on competition.

Outline of syllabus:
1. The classic problem of double marginalisation and its solution by nonstandard contracts (resale price maintenance, nonlinear pricing (rebates), exclusive territories, exclusive dealing etc.)
2. Contracts for service
3. Common agency
4. The delegation principle
5. The commitment problem
6. Interlocking relationships
7. Foreclosure by vertical contracts or mergers

Intended learning outcomes

After completing the course students are able to
(i) explain the results of theoretical industrial economics on vertical contracts;
(ii) apply the involved methods to given simple examples on their own;
(iii) recognize, in which real life situations (and how) the results can be applied;
(iv) analyze the impact of certain vertical contracts on competition.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: In the semester in which the course is offered
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Optimal Tax Theory	12-M-F4-161-m01

Module coordinator	Module offered by
holder of the Chair of Public Finance	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
The course will discuss the design of an optimal tax system. First, students will learn what criteria have to be met for a tax system to be optimal. Lectures will introduce key rules for taxing commodities as well as income and capital.
Examining specific taxation issues such as eco-tax, family taxation and the taxation of international enterprises, students will then gain more in-depth insights into these rules.
Reading: Lecture notes will be provided.

Outline of syllabus:
1. Optimal commodity taxation
2. Optimal income taxation
3. Optimal taxation of families
4. International tax competition

Intended learning outcomes

After completing this module students have a basic understanding of what is meant with "optimal taxation". They are able to apply this concept to specific normative questions of tax policy in practice. Students also learn to prepare and present short papers, where they discuss specific normative policy issues in groups.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)

Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Computational Economics - Advanced Level	12-M-NGM-161-m01

Module coordinator	Module offered by
holder of the Chair of Public Finance	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
This course will mostly be concerned with the analysis of public policy (in areas such as taxation, social security etc.). Providing students with state-of-the-art techniques for quantitative macroeconomic research in this very field and familiarising them with the relevant literature, this course will teach students how such policies redistribute between different generations and also within generations, how they may improve risk sharing when markets are incomplete and how they can trigger distortions and therefore hurt the aggregate economy.

Outline of syllabus:
1. Programming with FORTRAN and application of numerical methods
2. Solution techniques for dynamic programming problems
3. Policy analysis with stochastic growth and life cycle models

Reading:
Lecture notes will be provided.

Intended learning outcomes

After completing the course "Advanced Computational Economics" students will be able to
(i) edit and solve stochastic economic problems using advanced numerical techniques;
(ii) implement small scale economic models on the computer;
(iii) simulate tax and social security policy reforms and interpret the quantitative results in economic term.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Econometrics 2	12-M-OE2-161-m01

Module coordinator	Module offered by
holder of the Chair of Econometrics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Description:
This module deals with the basics, concepts and methods of the generalized least squares (GLS) framework. Partly as a motivation for the GLS model and partly for its own right, different specification and data problems as well as violations of model assumptions of the OLS estimator (as introduced in "Ökonometrie I" ("Econometrics I")) are discussed. This includes multicollinearity, a test for structural breaks, heteroskedastiticy and autocorrelation.
Linear algebra is used as formal aid.

Syllabus:
1. Specification analysis
2. Multicollinearity
3. Heteroskedastiticy
4. Autocorrelated disruptive terms
5. Generalized least squares (GLS)

Intended learning outcomes

Students acquire essential knowledge of the fundamentals, methods and concepts for estimating the generalized linear regression model (GLS) and can apply and interpret it. They are sensitized for specification problems, data problems and violations of the assumptions of the classical linear model (OLS) in order to be able to recognize, to assess and therefore adequately deal with these problems in theory and practice. This enables them to critically assess the use of the estimation methods in scientific work, to work independently on adequate implementation of empirical analyzes and to answer selected (economic) scientific issues if available data with the above-mentioned involved problems. The competences acquired in this course serve as a prerequisite for "Econometrics III", "Microeconometrics" und "Financial Econometrics".

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Econometrics 3			12-M-OE3-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This module deals with advanced econometric methods and concepts based on the classical and the generalized least squares estimator discussed in Ökonometrie I and II (Econometrics I and II). In particular, this includes the instrumental variable (IV) estimator, the generalized method of moments (GMM) estimator, distributed lag models as well as basic methods and concepts used in uni- and multivariate econometric time series analysis, including (non)stationarity, integration and cointegration.
Linear algebra is used as formal aid.

Syllabus:
1. Error-in-variables
2. IV estimation
3. Generalized least squares estimation
4. Distributed lag models
5. Stationary uni- and multivariate processes
6. Deterministic and stochastic trends
7. Integrated and cointegrated processes

Intended learning outcomes

The students acquire thorough understanding of advanced methods and concepts in econometrics. They get familiarized with diverse error-in-variables issues and will be capable of handling them appropriately. After the course, students understand the generalized method of moments (GMM) and the instrumental variable (IV) estimator to the extent that they can discuss their pros and cons, apply these to selected questions in quantitative economics and understand scientific papers using these methods. Furthermore, they become acquainted with selected time series issues, such as distributed lag models, non-stationarity, spurious correlation and cointegrated processes, enabling them to conduct a comprehensive time series analysis. In brief, the course enables students to apply the above mentioned methods and concepts to real life questions, assess their appropriateness and address their theoretical and practical benefits and shortcomings.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle
Teaching cycle: after announcement
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Industrial Management 3	12-M-SPM-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Industrial Management	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module will discuss contents and procedures of strategic production management and, in particular, planning and control concepts.
Students will become familiar with the essentials of strategic production management. Theoretical and analytical models will be used for analysing both economic and ecological issues. In addition, the module will discuss principles of value structure optimisation and will develop competences regarding the development of integrated mathematical models.

Intended learning outcomes

After completion of the module students are able to process, to analyze and answer questions of operations strategy structured and goal-oriented in a global context using appropriate methods. Furthermore, they know the main strategic tasks and objectives in production management and evaluate and apply planning and control concepts for the production in realistic application situations.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively eLearning, S, WS

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 40 to 60 minutes) or
b) presentation (approx. 20 minutes) and term paper (approx. 15 to 20 pages); (weighted 1:1) or
c) term paper (approx. 30 to 40 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Empirical HR Research with Stata	12-M-EPF-161-m01

Module coordinator	Module offered by
holder of the Chair for Human Resource Management and Organisation	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The seminar "Empirische Personalforschung" ("Empirical Personnel Economics") introduces and discusses the most important estimation problems and their application in the software package STATA. In addition, students learn, with the help of basic problems of personnel economics, how estimation programs are programmed in STATA.
Reading list to be provided in class.

Intended learning outcomes

The aim of the seminar is to enable students to understand and apply the most important estimation programmes and their application in STATA with a focus on problems in personnel economics.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 10 pages)
Language of assessment: German and/or English
Assessment offered: Once a year as announced

Allocation of places

12 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)

Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Human Resource Management and Industrial Relations			12-M-HRM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair for Human Resource Management and Organisation		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The lecture "Human Resource Management and Industrial Relations" introduces advanced theories, estimation techniques and empirical results from the areas of human resources management and institutional frameworks such as the different actors in industrial relations.

Syllabus

Introduction: Human Resource Management & Industrial Relationships

Chapter 1: The employment contract [formal model]

Chapter 2: Motivation [formal model]

Chapter 3: Employee resistance against reorganisations [empirical study]

Chapter 4: The role of works councils [formal model]

Chapter 5: Works councils and the employer wage structure [empirical study]

Chapter 6: The behaviour of labour unions [formal model]

Chapter 7: Learning process of employers [formal model and empirical study]

Chapter 8: Demographic challenges of HRM [formal model and empirical study]

Intended learning outcomes

The aim of the lectures is to enable students to understand and apply advanced theories, estimation techniques and empirical results in the area human resource management and industrial relations on the basis of scientific literature.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

20 places. There are no restrictions with regard to available places for students of the Master's degree programmes Business Management, International Economic Policy or Economics, Wirtschaftsinformatik (Business Information Systems), Wirtschaftsmathematik (Mathematics for Economics) and Chinese and Economics as well as China Business and Economics. A total of 20 places will be allocated to students of other subjects; should the number of applications exceed the number of available places, these places will be allocated by lot.

Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016) Master's degree (1 major) Applied Human Geography (2017) Master's degree (1 major) Management (2018) Master's degree (1 major) International Economic Policy (2018) exchange program Business Management and Economics (2022)

Module title	Abbreviation
Accounting and Capital Markets	12-M-REKA-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management, Controlling and Accounting	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The module focuses on financial and management accounting, their functions, possible configurations as well as their impact on internal and external recipients under consideration of the institutional setting. In this context, an economic perspective has priority over detailed legal arrangements and regulations by the standard setters. Based on the theoretical foundations of information economics as well as decision-making and balance sheet theories, typical issues concerning cost and managerial accounting as well as financial accounting and publicity are discussed.

Intended learning outcomes

Initially, a fundamental knowledge about the conception and impact of management and financial accounting as information systems is acquired. In the following, the module mainly sharpens the understanding of the economic impacts of the configuration of management and financial accounting. What is more, extensive knowledge about possible impacts of changes in institutional general frameworks is covered. For example, changes in valuation standards, publicity rules or regulations about the distribution of profits in enterprises and on capital markets are considered.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Information systems research	12-M-ISR-161-m01

Module coordinator	Module offered by
holder of the Chair of Information Systems Engineering	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course provides an overview of theoretical scientific foundations, theories, research topics and methods of international research in business informatics.

Intended learning outcomes

The module provides students with knowledge of:
(i) Exploration of classical themes of WI / IS research;
(ii) Getting to know the relevant paradigms, theories and methods;
(iii) Recognition of the interfaces to other areas of business administration and management practice;
(iv) Gain experience in finding and evaluation of scientific literature.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places.
Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)

Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
International Trade and the Multinational Firm			12-M-ITMF-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of International Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

The lecture starts out with theories of international trade based on comparative advantage (Ricardo and Heckscher-Ohlin) followed by theories based on monopolistic and oligopolistic competition to explain intra-industry trade. The final part covers firm heterogeneity and multinational firms. [If time permits the Armington model and the standard neoclassical model will be addressed.]

Outline

I Ricardian Trade Theory

II Heckscher-Ohlin Trade Theory

III New Trade Theory: Intra-Industry Trade, Increasing Returns to Scale, Imperfect Competition

IV Firm Heterogeneity, Trade and FDI

V The Multinational Firm

Literature:

The module draws heavily on articles from scholarly journals and handbooks. A detailed list of references with further references, notably journal articles, is provided with each chapter of the lecture. Material from the following books is also used:

Helpman, E. (2011). Understanding Global Trade. Princeton University Press.

Feenstra, R.C. (2016). Advanced International Trade. Theory and Evidence. Princeton University Press, Second Edition

Caves, R., R.W. Jones and J.A. Frankel (2007). World Trade and Payments. Addison Wesley

Bhagwati, J., A. Panagariya and T. N. Srinivasan (1998). Lectures on International Trade. Second Edition. MIT Press

Gandolfo, G. (1998). International Trade Theory and Policy. Springer-Verlag, Berlin and New York

Markusen, J.R., J.R. Melvin, W.H. Kaempfer, K. E. Maskus (1995). International Trade. McGrawHill

Barba Navaretti, G. and A.J. Venables (2004). Multinational Firms in the World Economy. Princeton University Press

Intended learning outcomes

The students acquire the ability to critically understand the causes and drivers of world trade and the developments of specialization patterns in the global economy. They learn to analyze, discuss and defend these developments and to apply the tools and methods to evaluate controversies associated with the ongoing deepening

of the international division of labor, in particular the repercussions of the global economy on national economies.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Module title			Abbreviation
Economic Geography			12-M-EG-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of International Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

The lecture starts with a brief motivation of the core issues and a short overview over key forces driving the allocation of economic activity in space. The main parts of the lecture cover the functioning and evolution of cities and city systems, and the economic geography of regions and countries.

I Motivation and Facts

II Location Basics

- Forces Shaping the Location of Economic Activity in Space

- Some Intellectual Background

III Urban and Regional Economics

- The Spatial Structure of Cities

- City Systems

III New Economic Geography

- From the New Trade Theory to the New Economic Geography

- Footloose Capital Model and Policy Applications

- Core Periphery Models and Policy Applications

- Empirics

Literature:

The course uses a combination of textbooks and journal articles. Articles from the Handbook of Urban and Regional Economics (current and previous volumes) are heavily used. Useful books are:

Brakman, W., H. Garretsen and Ch. van Marrewijk, 2009, The New Introduction to Geographical Economics, Cambridge University Press

Baldwin, R., R. Forslid, P. Martin, G. Ottaviano and F. Robert-Nicoud, 2003, Economic Geography and Public Policy, Princeton, 2003

Combes, P.P, Th. Mayer and J.F. Thisse, 2008, Economic Geography. The Integration of Regions and Nations, Princeton University Press

Fujita, M., P.R. Krugman and A.J. Venables, 1999: The Spatial Economy, MIT Press

Fujita, M. and J.-F. Thisse (2013). Economics of Agglomeration. Cities, Industrial Location and Regional Growth. Cambridge University Press.

Krugman, P.R., 1991, Geography and Trade, MIT Press

Intended learning outcomes

Students acquire a knowledge of the forces which determine the allocation of economic activity in space and they learn to apply fundamental models of cities, city systems and of regional agglomerations to understand and analyze policy issues involving local, regional and international policy questions both analytically and in an economic intuitive way.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Empirical Regional- and International Economic Research			12-M-ERA-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

No information on contents available.

Intended learning outcomes

No information on intended learning outcomes available.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 10 pages) on empirical analysis prepared by candidates or
c) portfolio (approx. 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Topics in International Economics 1			12-M-ATIÖ1-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

Current topics in international economics and economic geography [e.g. Urbanization and Inequality; Tasks, Trade, and Cities; Outsourcing, Offshoring and Multinational Firms; Competition of Locations, Jurisdictions and Systems; Globalization and the Environment; Trade, Multinational Firms and Labor Markets; Triumph of the City]

Literature:

Peer-reviewed articles and/or monographs.

Intended learning outcomes

Drawing on current cutting-edge research, students are enabled to analyze current research questions and to learn and apply research methods. The seminar style of the course teaches them to present their own seminar papers and research both in written and in oral form. Students are enabled to critically analyze and discuss the work of their peers.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively WS instead of V + Ü

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages) or
c) portfolio (approx. 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)

Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Topics in International Economics 2	12-M-ATIÖ2-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Content

Current topics in international economics and economic geography [e.g. Urbanization and Inequality; Tasks, Trade, and Cities; Outsourcing, Offshoring and Multinational Firms; Competition of Locations, Jurisdictions and Systems; Globalization and the Environment; Trade, Multinational Firms and Labor Markets; Triumph of the City]

Literature:

Peer-reviewed articles and/or monographs.

Intended learning outcomes

Drawing on current cutting-edge research, students are enabled to analyze current research questions and to learn and apply research methods. The seminar style of the course teaches them to present their own seminar papers and research both in written and in oral form. Students are enabled to critically analyze and discuss the work of their peers.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively WS instead of V + Ü

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages) or
c) portfolio (approx. 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)

Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Topics in International Economics 3	12-M-ATIÖ3-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Content

Current topics in international economics and economic geography [e.g. Urbanization and Inequality; Tasks, Trade, and Cities; Outsourcing, Offshoring and Multinational Firms; Competition of Locations, Jurisdictions and Systems; Globalization and the Environment; Trade, Multinational Firms and Labor Markets; Triumph of the City]

Literature:

Peer-reviewed articles and/or monographs.

Intended learning outcomes

Drawing on current cutting-edge research, students are enabled to analyze current research questions and to learn and apply research methods. The seminar style of the course teaches them to present their own seminar papers and research both in written and in oral form. Students are enabled to critically analyze and discuss the work of their peers.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively WS instead of V + Ü

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages) or
c) portfolio (approx. 20 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)

Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Managerial Accounting

(20 ECTS credits)

Compulsory

(10 ECTS credits)

Module title			Abbreviation
Coordination, Budgeting and Incentives in Companies			12-M-KOBO-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Business Management, Controlling and Accounting		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module focuses on accounting-based instruments to control behavior in decentralized enterprises. The course first discusses the role of accounting in the context of decision-making and behavioral controlling as well as informational analyses. Afterwards, the most common instruments of behavioral controlling (budgeting, value-oriented management, transfer prices) are discussed with regard to theory and practice.

Intended learning outcomes

This module aims to provide knowledge in the context of behavioral control in enterprises. Knowledge about requirements on instruments used for behavioral control are discussed and competences for deployment, structure and development of coordination tools are provided.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Strategic Managerial Accounting			12-M-INST-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management, Controlling and Accounting	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The module focuses on accounting instruments, which are applied in the context of strategic management of enterprises. First, it addresses important drivers of strategic decisions from a microeconomic perspective, such as the emergence of cost and quality advantages in competition as well as scale and experience curve effects. Second, the module covers analytical and heuristic techniques of planning and control. In the context of these techniques, instruments of target costing, life cycle cost analysis, benchmarking and business wargaming are discussed with regard to their theoretical foundation and fields of application.

Intended learning outcomes

Initially, knowledge about fundamental requirements concerning instruments of decision-making and behavior control within enterprises is acquired. What is more, the module conveys obtaining knowledge about the strengths and weaknesses and therewith fields of application and limits of prevalent instruments of strategic corporate management used by practitioners.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Compulsory Core Electives

(10 ECTS credits)

Module title			Abbreviation
Theory of Industrial Organization 1			12-M-TI1-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Theory of industrial organisation:
1. Monopoly pricing
   - Nonlinear pricing and mechanism design
   - Dynamic pricing: experience goods, durable goods
2. Oligopoly pricing
   - Static price and quantity competition in homogeneous and differentiated goods markets
   - Comparative statics
   - Equilibrium market structure
3. Dynamic competition in oligopoly markets
   - Subgame perfect equilibrium and models of dynamic competition
   - Repeated games and collusion
4. Strategic behaviour by incumbent firms
   - Entry deterrence and predation
   - Signalling and reputation
5. Behavioral Industrial Organization
   - Reference Dependent Preferences and Framing Effects
   - Time inconsistent behavior

The course will be taught in English.

Intended learning outcomes

Students which complete this class will acquire a working knowledge of advanced theoretical models of competition in oligopoly markets as well as sophisticated pricing techniques in monopoly markets. They will learn the conditions under which the predictions of these models are valid. They will become familiar with applications of advanced game theoretic tools, such as dynamic models of competition, for studying interactions between firms in markets. By means of comprehensive exercises, they will apply the methods they learn in class to practically relevant problems. They will be in a position to read academic papers on related topics, assess the strengths and weaknesses of an approach, summarize and comment on these papers and suggest possible extensions.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload
150 h
Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Incentives in Organizations	12-M-AO-161-m01

Module coordinator	Module offered by
holder of the Chair for Human Resource Management and Organisation	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Based on the classical principal-agent theory, this course discusses methodological and empirical aspects of incentives in organisations. It uses contents from advanced text books and original (mainly empirical) research articles.

Outline of syllabus

1. Principal-agent theory

2. Do top managers earn too much? (application)

3. Performance-based payment

4. Implementation of performance-based payment in companies (application)

5. Seniority payment (with application)

6. Financial incentives to work after retirement (with application)

7. Efficiency wages (with case study)

8. Team incentives (with case study)

Intended learning outcomes

Students acquire a working knowledge of key incentive models models, selected empirical applications and the necessary econometric background. This enables them to identify the advantages and disadvantages of different incentive systems that are applied in the enterprise context, to make informed management analyses and to critically evaluate current controversies and developments as well as to conduct their own research.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Project Management and Control	12-M-PROM-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management, Controlling and Accounting	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The module focuses on the discussion and critical examination of instruments and methods used in the context of project management and control within enterprises. Both classic and agile approaches to project management are considered. It covers characteristic features and structures of projects, their possible success factors, methods and instruments of control and management of projects in various project phases. The theoretical basis as well as potential applications of these instruments are discussed.

Intended learning outcomes

Initially, knowledge about fundamental requirements concerning instruments of project management and control is acquired. What is more, the module conveys knowledge about strengths and weaknesses and therewith fields of application and limits of commonly used instruments and methods of practitioners. Competences within the configuration and development of the project management and control as well as skills within the practical use are obtained..

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Accounting and Capital Markets	12-M-REKA-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management, Controlling and Accounting	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The module focuses on financial and management accounting, their functions, possible configurations as well as their impact on internal and external recipients under consideration of the institutional setting. In this context, an economic perspective has priority over detailed legal arrangements and regulations by the standard setters. Based on the theoretical foundations of information economics as well as decision-making and balance sheet theories, typical issues concerning cost and managerial accounting as well as financial accounting and publicity are discussed.

Intended learning outcomes

Initially, a fundamental knowledge about the conception and impact of management and financial accounting as information systems is acquired. In the following, the module mainly sharpens the understanding of the economic impacts of the configuration of management and financial accounting. What is more, extensive knowledge about possible impacts of changes in institutional general frameworks is covered. For example, changes in valuation standards, publicity rules or regulations about the distribution of profits in enterprises and on capital markets are considered.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Industrial Management 1	12-M-SBM-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Industrial Management	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course addresses central issues of strategic supply management. The supply function of the company (purchasing, materials management, procurement logistics) and its strategic importance is analysed and basic methods are developed that are relevant in this area.

Intended learning outcomes

Students learn the principles of performance-oriented optimization of all procurement activities to develop long-term, competitively sensitive potential for success. After completion of the module students are able to prepare structured, to goal-oriented analyze and to respond to performance-oriented issues of strategic procurement based on key instruments. Students are able to accurately classify the tasks of the procurement and to describe and discuss their strategic importance and dominate essential methods and procedures used in this area to apply.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Course type: alternatively eLearning, S, WS

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 40 to 60 minutes) or
b) presentation (approx. 20 minutes) and term paper (approx. 15 to 20 pages); (weighted 1:1) or
c) term paper (approx. 30 to 40 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)

Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Econometrics 1			12-M-OE1-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This module deals with the basic concept and methodology of the ordinary least squares (OLS) regression model. In particular, model assumptions and properties are discussed and formally motivated. In addition, the module examines linear restrictions on the model's explanatory variables as well as dummy variables and introduces tests to verify simple and multiple linear restrictions.

Linear algebra is used as formal aid.

Outline of syllabus:
1. Random variables
2. Important distributions
3. Point estimates
4. Simple linear regression model
5. Model assumptions
6. Model properties
7. Simple hypothesis tests
8. Multiple linear regression model
9. Linear restrictions
10. Dummy variables
11. Multiple hypothesis tests

Intended learning outcomes

The students acquire knowledge of the basics, concepts and methods used in the classical linear regression model and understand the role of econometrics in science and data analysis. In particular, they learn how to analytically derive, calculate and interpret the coefficients, standard errors and p-values of a classic regression output of the multiple regression model. Furthermore, they are able to formally state and motivate the assumptions and properties of OLS and know how to deal with transformed and dummy variables. Additionally, students will be able to test multiple linear restrictions on the parameters and will be able to apply these tests to real economic, business and social science questions.
The competences acquired in this course serve as a prerequisite for "Econometrics II", "Econometrics III", "Microeconometrics" und "Financial Econometrics".

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: each semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Econometrics 2			12-M-OE2-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This module deals with the basics, concepts and methods of the generalized least squares (GLS) framework. Partly as a motivation for the GLS model and partly for its own right, different specification and data problems as well as violations of model assumptions of the OLS estimator (as introduced in "Ökonometrie I" ("Econometrics I")) are discussed. This includes multicollinearity, a test for structural breaks, heteroskedastiticy and autocorrelation.
Linear algebra is used as formal aid.

Syllabus:
1. Specification analysis
2. Multicollinearity
3. Heteroskedastiticy
4. Autocorrelated disruptive terms
5. Generalized least squares (GLS)

Intended learning outcomes

Students acquire essential knowledge of the fundamentals, methods and concepts for estimating the generalized linear regression model (GLS) and can apply and interpret it. They are sensitized for specification problems, data problems and violations of the assumptions of the classical linear model (OLS) in order to be able to recognize, to assess and therefore adequately deal with these problems in theory and practice. This enables them to critically assess the use of the estimation methods in scientific work, to work independently on adequate implementation of empirical analyzes and to answer selected (economic) scientific issues if available data with the above-mentioned involved problems. The competences acquired in this course serve as a prerequisite for "Econometrics III", "Microeconometrics" und "Financial Econometrics".

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Decision Support Systems	12-M-DSS-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Analytics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The course discusses advanced approaches for modelling and solving decision problems in business settings. The acquired insights are used to design and implement decision support systems using standard software tools (Python).

Intended learning outcomes

After successfully completing the course, students should be able to

- Understand the structure of classic business decision problems
- Isolate key elements from general problem descriptions and convert them to quantitative decision models
- Solve different classes of optimization problems (linear, network, integer, multi-objective, non-linear, stochastic)
- Implement decision support systems

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) oral examination (one candidate each: approx. 15 to 20 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

40 places.
Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)

Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Strategic Decisions and Competition			12-M-SDC-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

1. Strategic situations and decision making

2. Analyzing strategic situations with game theory

1. Noncooperative simultaneous move games
2. Nash equilibrium
3. Models of oligopoly markets

3. Dynamic Games

1. Two(-multi) stage games and subgame perfect equilibrium
2. Role of commitment in dynamic situations
3. Models of advertising
4. Wage bargaining and unions

4. Repeated Games

1. Emergence of coordination in long interactions
2. Collusion between competing firms
3. Time consistent monetary policy

5. Static games of incomplete Information

1. Bayesian Nash equilibrium
2. Auctions

6. Dynamic games of incomplete information

1. Moral hazard and nonlinear pricing
2. Perfect Bayesian equilibrium
3. Signalling games
4. Job-market signalling
5. Corporate investment and capital structure

Intended learning outcomes

After successful completion of this class, the students should be familiar with economic models that can be used to shape managerial strategy and aid in making decisions in strategic situations. Especially, by making use of simple two stage games, they should be able to formulate dynamic policies in a wide variety of strategic situations. The students will acquire an intuitive understanding of the underlying economic mechanisms which emerge from the analysis of game theoretic models for a wide variety of strategic situations arising in industrial economics, marketing, organization, finance, trade and labor. Moreover, they will acquire skills which enable them to make predictions in strategic situations by making use of simple mathematical models. By means of completing case based exercises, they will learn to transform real life business situations to an appropriate economic model. Based on an analysis of this model, they will be able to devise optimal strategies and derive the corresponding managerial implications.

The course will be taught in English.
Courses (type, number of weekly contact hours, language — if other than German)
V (2) + Ü (2)
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)
a) written examination (approx. 60 to 120 minutes) or b) term paper (approx. 15 to 20 pages) Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered creditable for bonus
Allocation of places
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Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Managerial Accounting in the Company Management	12-M-ClU-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management, Controlling and Accounting	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Within the module, theoretical basics of change management are covered. In addition, we present and jointly analyze existing change projects in detail. We try to answer related questions, too. For example, the module discusses how to involve stakeholders in change, what motivates them to embrace change, and whether participation is a universal principle. The module covers projects like merging two departments, restarting a department with team building, conducting an employee survey, or developing a new mission statement. The majority of the projects are taken from the social sector, but can be transferred to industry and SMEs.

Intended learning outcomes

After participating the lecture, students will be able to understand the occurrence of resistance and massive emotional reactions in change processes. Change processes can be critically analyzed and the use of typical instruments in change processes can be questioned. Students are able to identify the typical pitfalls and hurdles in these processes and are able to use their knowledge for own future projects as well as to create their own solutions in change processes.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Advanced Financial Accounting (German GAAP, IFRS)			12-M-ER-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Large and mostly multinational companies are key players in our globalized economy. A wide variety of interest groups, such as investors, need access to reliable information about the economic activities of these increasingly complex companies to make the right decisions. To contribute to a better functioning of capital markets in the European Union, publicly traded companies have to apply a single set of international accounting standards to prepare their consolidated financial statements. This module covers the necessary steps to prepare and interpret consolidated financial statements under IFRS (International Financial Reporting Standards). It provides students with a systematic approach and interpretation of group accounting according to international rules. In particular, the module coveys the basic principles of group accounting and an in-depth knowledge of relevant standards. Students get to know different types of company mergers, acquisitions, and investments and the corresponding accounting methods. They will learn about the relevance of consolidated financial statements, how to identify groups and understand the consolidation process. In addition, various recent topics of group accounting are covered, e. g., positive and negative goodwill, non-controlling interests, intra-group transactions, and goodwill impairment.

Intended learning outcomes

Students understand the key concepts and elements of group accounting under IFRS (International Financial Reporting Standards). They also have an in-depth knowledge of the steps necessary to prepare and interpret consolidated financial statements following international accounting rules. In particular, students can recognize the need for consolidated financial statements, solve relevant consolidation problems, and critically evaluate consolidated financial statements.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 to 120 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Information Processing within Organizations			12-IV-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module lays the foundation for understanding business informatics and explores various aspects of the field. It covers different application areas of business information systems, the latest technologies, and their integration into existing structures.

Content:
- Integration into information systems
- Change and project management, requirements engineering
- Data storage, processing, and structures
- Business logic, algorithms, optimization, system architecture, microservices, virtualization
- Internal vs. external integration, technical interfaces
- Cloud, operational models, platforms, distributed ledger technology
- Data and IT security
- Process/task mining, hyperautomation, business intelligence, machine learning

Intended learning outcomes

The "Information Processing within Organizations" module aims to achieve the following learning outcomes:
1. Knowledge of Information Systems: Students understand and apply core concepts such as data processing and system architecture, can integrate new technologies into systems, and develop practical applications.
2. Analysis of Business Processes: They recognize and analyze business information systems, model business processes, and optimize system landscapes using ERP systems and project management methods.
3. Development of Business Solutions: Students use their knowledge of modern technologies and business intelligence to develop integrative business solutions and solve operational challenges.
4. Evaluation of Technology Trends: They have a deep understanding of IT security and modern technologies, critically assess technology trends, and lead their implementation in business contexts.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Information Systems (2022)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Applied Decision Theory

(20 ECTS credits)

Compulsory

(10 ECTS credits)

Module title	Abbreviation
Advanced Microeconomics	12-M-AM-161-m01

Module coordinator	Module offered by
holder of the Chair for Economics, Contract Theory and Information Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In a nutshell, microeconomic theory considers the behavior of individual economic agents and builds from this foundation to a theory of aggregate economic outcomes, which then can be applied for conducting welfare analysis and giving policy advice. This lecture addresses the core building block of this thought complex: individual decision making and behavior. Specifically, students will come to understand in detail the standard models of riskless consumer choice, choice under risk and intertemporal choice and learn about the empirical challenges and limitations of these models.

Throughout the lecture, we will work with precise mathematical formalizations of the ideas that we want to think and talk about. In consequence, a solid understanding of the mathematical toolbox of standard microeconomics (e.g., differential calculus and constrained optimization; basic set theory; integration by parts) will be helpful as it will allow to focus on the underlying economic intuition. However, every required mathematical concept will be introduced and explained along the way, such that a strong interest in formal economic analysis is more important than an advanced mathematical background.

The exposition is primarily based on the standard graduate textbooks

- Mas-Colell, Whinston and Green (1995): "Microeconomic Theory"
- Jehle and Reny (2001): "Advanced Microeconomic Theory"

Intended learning outcomes

After completing the course students will be able to
- explain essential findings of microeconomic theory,
- apply the involved methods to given stylized examples on their own,
- recognize in which real life situations and how the results can be applied.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) written examination (questions concerning mathematical methodology; approx. 120 minutes) or
c) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Contract Theory			12-M-CT-161-m01
Module coordinator		**Module offered by**	
holder of the Chair for Economics, Contract Theory and Information Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

During the 1960/70s, microeconomic theory came to acknowledge that many (if not most) economic transactions are characterized by asymmetric distribution of information – i.e., at least one of the parties participating in a transaction usually is privy to information that the remaining parties do not have access to. This asymmetric distribution of information subsequently was recognized to be a major impediment for transactions to be economically efficient. Contract theory addresses the question how the inefficiencies arising from asymmetric distribution of information can best be mitigated by appropriate design of the contractual (or, more generally, institutional) framework that governs the transaction under consideration. This lecture covers the baseline models of "moral hazard" (i.e., situations where one party has private knowledge after a contract has been signed) and "adverse selection" (i.e., situations where one party has private knowledge before a contract is signed). As applications we will address questions discussed in organizational, personnel or industrial economics, such as incentive design within organizations or the design of labor law regulations and competition laws.

Even though we will work with precise mathematical formalizations of the ideas that we want to think and talk about, this course requires little more than a solid understanding of basic differential calculus. More important than having a solid mathematical background is having a strong interest in formal economic analysis and fun with logical thinking and puzzle solving.

The exposition is primarily based on the following textbook:

- Laffont and Martimort (2002): "The Theory of Incentives"

Intended learning outcomes

After completing the course students will be able to
- explain essential findings of contract theory,
- apply the involved methods to given stylized examples on their own,
- interpret the properties of real-life contracts as the outcome of the interaction between two or more contracting parties in the presence of asymmetric information,
- evaluate government interventions with regard to their effect on the efficiency properties of the interaction between the contracting parties.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload
150 h
Teaching cycle
Teaching cycle: no courses offered
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Interdisciplinary Seminars and Workshops

(10 ECTS credits)

Module title			Abbreviation
Theory of Industrial Organization 1			12-M-TI1-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Theory of industrial organisation:
1. Monopoly pricing
   - Nonlinear pricing and mechanism design
   - Dynamic pricing: experience goods, durable goods
2. Oligopoly pricing
   - Static price and quantity competition in homogeneous and differentiated goods markets
   - Comparative statics
   - Equilibrium market structure
3. Dynamic competition in oligopoly markets
   - Subgame perfect equilibrium and models of dynamic competition
   - Repeated games and collusion
4. Strategic behaviour by incumbent firms
   - Entry deterrence and predation
   - Signalling and reputation
5. Behavioral Industrial Organization
   - Reference Dependent Preferences and Framing Effects
   - Time inconsistent behavior

The course will be taught in English.

Intended learning outcomes

Students which complete this class will acquire a working knowledge of advanced theoretical models of competition in oligopoly markets as well as sophisticated pricing techniques in monopoly markets. They will learn the conditions under which the predictions of these models are valid. They will become familiar with applications of advanced game theoretic tools, such as dynamic models of competition, for studying interactions between firms in markets. By means of comprehensive exercises, they will apply the methods they learn in class to practically relevant problems. They will be in a position to read academic papers on related topics, assess the strengths and weaknesses of an approach, summarize and comment on these papers and suggest possible extensions.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload
150 h
Teaching cycle
Teaching cycle: winter semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Theory of Industrial Organization 2			12-M-TI2-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
This course discusses vertical contracts in supply chains and their impact on competition.

Outline of syllabus:
1. The classic problem of double marginalisation and its solution by nonstandard contracts (resale price maintenance, nonlinear pricing (rebates), exclusive territories, exclusive dealing etc.)
2. Contracts for service
3. Common agency
4. The delegation principle
5. The commitment problem
6. Interlocking relationships
7. Foreclosure by vertical contracts or mergers

Intended learning outcomes

After completing the course students are able to
(i) explain the results of theoretical industrial economics on vertical contracts;
(ii) apply the involved methods to given simple examples on their own;
(iii) recognize, in which real life situations (and how) the results can be applied;
(iv) analyze the impact of certain vertical contracts on competition.

Courses (type, number of weekly contact hours, language — if other than German)

V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 120 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
Assessment offered: In the semester in which the course is offered
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Microeconometrics			12-M-MIK-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course teaches basics, methods and concepts for the analysis of individual data. The scaling of observed data is adequately addressed. The maximum likelihood method, which is important for this type of data, is explained in detail.

Outline
1. What is microeconometrics?
2. Models for qualitatively dependent variables
3. Models for limited dependent variables
4. Time-dependent models

References
1. Greene, W. H.: Econometric Analysis, Philip Alan.
2. Ronning, G.: Microeconometrics, Springer Verlag.
3. Verbeek, M.: Modern Econometrics, Wiley.
4. Winkelmann, R., Boes, S.: Analysis of Microdata, Springer Verlag.

Intended learning outcomes

Students have significant knowledge of the maximum likelihood method and the most important models for qualitatively and limited dependent variables. They can autonomously perform estimations with statistic programs such as R and interpret the results meaningfully.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Optimal Tax Theory			12-M-F4-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Public Finance		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Description:
The course will discuss the design of an optimal tax system. First, students will learn what criteria have to be met for a tax system to be optimal. Lectures will introduce key rules for taxing commodities as well as income and capital.
Examining specific taxation issues such as eco-tax, family taxation and the taxation of international enterprises, students will then gain more in-depth insights into these rules.
Reading: Lecture notes will be provided.

Outline of syllabus:
1. Optimal commodity taxation
2. Optimal income taxation
3. Optimal taxation of families
4. International tax competition

Intended learning outcomes

After completing this module students have a basic understanding of what is meant with "optimal taxation". They are able to apply this concept to specific normative questions of tax policy in practice. Students also learn to prepare and present short papers, where they discuss specific normative policy issues in groups.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)

Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Managerial Analytics & Decision Making			12-M-MADM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Logistics and Quantitative Methods		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The course "Managerial Analytics & Decision Making" discusses quantitative methods to structure and solve a diverse set of management problems and demonstrates the application of modern methods with the help of multiple case studies.

Intended learning outcomes

After completing this course students can
(i) better understand and structure problems;
(ii) apply important theoretical and empirical frameworks to practical problems that evaluate good and bad decision making;
(iii) implement advanced analytical methods to support decision making under risk.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 to 20 pages)
Language of assessment: German and/or English
creditable for bonus

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Human Resource Management and Industrial Relations			12-M-HRM-161-m01
Module coordinator		**Module offered by**	
holder of the Chair for Human Resource Management and Organisation		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

The lecture "Human Resource Management and Industrial Relations" introduces advanced theories, estimation techniques and empirical results from the areas of human resources management and institutional frameworks such as the different actors in industrial relations.

Syllabus

Introduction: Human Resource Management & Industrial Relationships

Chapter 1: The employment contract [formal model]

Chapter 2: Motivation [formal model]

Chapter 3: Employee resistance against reorganisations [empirical study]

Chapter 4: The role of works councils [formal model]

Chapter 5: Works councils and the employer wage structure [empirical study]

Chapter 6: The behaviour of labour unions [formal model]

Chapter 7: Learning process of employers [formal model and empirical study]

Chapter 8: Demographic challenges of HRM [formal model and empirical study]

Intended learning outcomes

The aim of the lectures is to enable students to understand and apply advanced theories, estimation techniques and empirical results in the area human resource management and industrial relations on the basis of scientific literature.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

20 places. There are no restrictions with regard to available places for students of the Master's degree programmes Business Management, International Economic Policy or Economics, Wirtschaftsinformatik (Business Information Systems), Wirtschaftsmathematik (Mathematics for Economics) and Chinese and Economics as well as China Business and Economics. A total of 20 places will be allocated to students of other subjects; should the number of applications exceed the number of available places, these places will be allocated by lot.

Additional information
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Workload
150 h
Teaching cycle
Teaching cycle: summer semester
Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Business Information Systems (2016) Master's degree (1 major) Business Management (2015) Master's degree (1 major) China Business and Economics (2016) Master's degree (1 major) International Economic Policy (2015) Master's degree (1 major) China Language and Economy (2016) Master's degree (1 major) Applied Human Geography (2017) Master's degree (1 major) Management (2018) Master's degree (1 major) International Economic Policy (2018) exchange program Business Management and Economics (2022)

Module title			Abbreviation
International Trade and the Multinational Firm			12-M-ITMF-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of International Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content

The lecture starts out with theories of international trade based on comparative advantage (Ricardo and Heckscher-Ohlin) followed by theories based on monopolistic and oligopolistic competition to explain intra-industry trade. The final part covers firm heterogeneity and multinational firms. [If time permits the Armington model and the standard neoclassical model will be addressed.]

Outline

I Ricardian Trade Theory

II Heckscher-Ohlin Trade Theory

III New Trade Theory: Intra-Industry Trade, Increasing Returns to Scale, Imperfect Competition

IV Firm Heterogeneity, Trade and FDI

V The Multinational Firm

Literature:

The module draws heavily on articles from scholarly journals and handbooks. A detailed list of references with further references, notably journal articles, is provided with each chapter of the lecture. Material from the following books is also used:

Helpman, E. (2011). Understanding Global Trade. Princeton University Press.

Feenstra, R.C. (2016). Advanced International Trade. Theory and Evidence. Princeton University Press, Second Edition

Caves, R., R.W. Jones and J.A. Frankel (2007). World Trade and Payments. Addison Wesley

Bhagwati, J., A. Panagariya and T. N. Srinivasan (1998). Lectures on International Trade. Second Edition. MIT Press

Gandolfo, G. (1998). International Trade Theory and Policy. Springer-Verlag, Berlin and New York

Markusen, J.R., J.R. Melvin, W.H. Kaempfer, K. E. Maskus (1995). International Trade. McGrawHill

Barba Navaretti, G. and A.J. Venables (2004). Multinational Firms in the World Economy. Princeton University Press

Intended learning outcomes

The students acquire the ability to critically understand the causes and drivers of world trade and the developments of specialization patterns in the global economy. They learn to analyze, discuss and defend these developments and to apply the tools and methods to evaluate controversies associated with the ongoing deepening

of the international division of labor, in particular the repercussions of the global economy on national economies.

Courses (type, number of weekly contact hours, language — if other than German)

Ü (2) + V (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 to 90 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: German and/or English

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) Media Communication (2016)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Media Communication (2018)
Master's degree (1 major) Media Communication (2019)

Interdisciplinary Seminars and Workshops

(10 ECTS credits)

Module title	Abbreviation
Research in Groups - Dynamical Systems and Control Theory	10-M=GDSC-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Selected modern topics in dynamical systems and control theory.

Recommended previous knowledge:
Knowledge of the contents of the module "Mathematical Control Theory" or "Control Theory" is required.

Intended learning outcomes

The student gains insight into contemporary research problems in dynamical systems and control theory. He/She masters advanced techniques in this field and can apply them to complex problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + S (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)

Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)

Module title	Abbreviation
Research in Groups - Measure and Integral	10-M=GMAI-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Aspects of measure and integration theory: sigma algebras and Borel sets, volume and measure, measurable functions and Lebesgue integrals, selected applications, e. g. product measures (with Fubini's theorem and the transformation rule), Lp spaces and absolute continuity, measures on topological spaces.

Intended learning outcomes

The student gains insight into contemporary research problems in measure and integration theory. He/She masters advanced techniques in this field and can apply them to complex problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + S (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)

Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Research in Groups - Numerical Mathematics and Applied Analysis	10-M=GNMA-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Selected topics in numerical mathematics, applied analysis or scientific computing.

Recommended previous knowledge:
Depending on the content, basic and advanced knowledge from different areas of analysis and/or numerical mathematics is required. In case of doubt, it is recommended to consult the lecturer.

Intended learning outcomes

The student gains insight into a contemporary research problems in numerical mathematics or applied analysis. He/She masters advanced techniques in this field and can apply them to complex problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + S (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

--

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)

Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Research in Groups - Robotics, Optimization and Control Theory	10-M=GROC-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Selected modern topics in robotics, optimisation and control theory.

Recommended previous knowledge:
Knowledge of the contents of the module "Mathematical Control Theory" or "Control Theory" is required.

Intended learning outcomes

The student gains insight into contemporary research problems in robotics, optimization and control theory. He/She masters advanced techniques in this field and can apply them to complex problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + S (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)

Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Research in Groups - Time Series Analysis	10-M=GTSA-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Selected modern topics in time series analysis.

Recommended previous knowledge:
Basic knowledge of stochastics is required, such as that acquired in the "Stochastics 1" module. Knowledge of the contents of the module "Stochastics 2" is also recommended.

Intended learning outcomes

The student gains insight into contemporary research problems in time series analysis. He/She masters advanced techniques in this field and can apply them to complex problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + S (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)

Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Economathematics (2025)

Module title			Abbreviation
Research in Groups - Statistics			10-M=GSTA-161-m01
Module coordinator		**Module offered by**	
Dean of Studies Mathematik (Mathematics)		Institute of Mathematics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
10	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Selected modern topics in statistics.

Recommended previous knowledge:
Basic knowledge of stochastics is required, such as that acquired in the "Stochastics 1" module. Knowledge of the contents of the module "Stochastics 2" is also recommended. Depending on the content of the course, other prior knowledge may also be helpful; consultation with the lecturer is recommended.

Intended learning outcomes

The student gains insight into contemporary research problems in statistics. He/She masters advanced techniques in this field and can apply them to complex problems.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + S (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

300 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)

Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Seminar in Dynamical Systems and Control	10-M=SDSC-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

A modern topic in dynamical systems and control.

Recommended previous knowledge:
Knowledge of the contents of the module "Mathematical Control Theory" or "Control Theory" is required.

Intended learning outcomes

The student is able to elaborate a contemporary research topic. This includes comprehending and structuring of the topic and the available literature, preparing a talk and the ability to participate in a scientific discussion.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)

Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)

Module title	Abbreviation
Seminar in Financial and Insurance Mathematics	10-M=SFIM-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

A modern topic in financial and insurance mathematics.

Recommended previous knowledge:
Familiarity with the contents of the modules "Introduction to Stochastic Financial Mathematics" and "Stochastics 1" is strongly recommended.

Intended learning outcomes

The student is able to elaborate a contemporary research topic. This includes comprehending and structuring of the topic and the available literature, preparing a talk and the ability to participate in a scientific discussion.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)

Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Giovanni Prodi Seminar (Master)	10-M=SGPCin-152-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

A modern topic in the research expertise of the current holder of the Giovanni Prodi Chair.

Intended learning outcomes

The student is able to elaborate a contemporary research topic. This includes comprehending and structuring of the topic and the available literature, preparing a talk and the ability to participate in a scientific discussion.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)
Module taught in: English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics International (2015)
Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Mathematics International (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Mathematics International (2022)

Master's degree (1 major) Economathematics (2022)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's degree (1 major) Mathematics International (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title			Abbreviation
Interdisciplinary Seminar			10-M=SIDC-161-m01
Module coordinator		**Module offered by**	
Dean of Studies Mathematik (Mathematics)		Institute of Mathematics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

A modern topic in mathematics with interdisciplinary aspects.

Intended learning outcomes

The student is able to elaborate a contemporary research topic. This includes comprehending and structuring of the topic and the available literature, preparing a talk and the ability to participate in a scientific discussion.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)

Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Economathematics (2025)

Module title			Abbreviation
Seminar Mathematics in the Sciences			10-M=SMSC-161-m01
Module coordinator		**Module offered by**	
Dean of Studies Mathematik (Mathematics)		Institute of Mathematics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

A modern topic in mathematics in the sciences.

Recommended previous knowledge:
Basic knowledge from the modules "Ordinary Differential Equations" and "Introduction to Partial Differential Equations" is recommended, as well as basic knowledge of functional analysis.

Intended learning outcomes

The student is able to elaborate a contemporary research topic. This includes comprehending and structuring of the topic and the available literature, preparing a talk and the ability to participate in a scientific discussion.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

--

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)

Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Economathematics (2025)

Module title			Abbreviation
Seminar in Numerical Mathematics and Applied Analysis			10-M=SNMA-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

A modern topic in numerical mathematics or applied analysis.

Recommended previous knowledge:
Depending on the content, basic and advanced knowledge from different areas of analysis and/or numerical mathematics is required. In case of doubt, it is recommended to consult the lecturer.

Intended learning outcomes

The student is able to elaborate a contemporary research topic. This includes comprehending and structuring of the topic and the available literature, preparing a talk and the ability to participate in a scientific discussion.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

--

Referred to in LPO I (examination regulations for teaching-degree programmes)

--

Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)

Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Seminar in Optimization	10-M=SOPT-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

A modern topic in optimisation.

Intended learning outcomes

The student is able to elaborate a contemporary research topic. This includes comprehending and structuring of the topic and the available literature, preparing a talk and the ability to participate in a scientific discussion.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's degree (1 major) Computational Mathematics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Computational Mathematics (2019)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)

Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation
Seminar in Statistics	10-M=SSTA-161-m01

Module coordinator	Module offered by
Dean of Studies Mathematik (Mathematics)	Institute of Mathematics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

A modern topic in statistics.

Recommended previous knowledge:
Basic knowledge of stochastics is required, such as that acquired in the "Stochastics 1" module. Knowledge of the contents of the module "Stochastics 2" is also recommended. Depending on the content of the course, other prior knowledge may also be helpful; consultation with the lecturer is recommended.

Intended learning outcomes

The student is able to elaborate a contemporary research topic. This includes comprehending and structuring of the topic and the available literature, preparing a talk and the ability to participate in a scientific discussion.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)

Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title			Abbreviation
Seminar in Non-linear Analysis			10-M=SNLA-161-m01
Module coordinator		**Module offered by**	
Dean of Studies Mathematik (Mathematics)		Institute of Mathematics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

A modern topic in non-linear analysis.

Recommended previous knowledge:
Depending on the content, basic and advanced knowledge from different areas of analysis is required. In case of doubt, it is recommended to consult the lecturer.

Intended learning outcomes

The student is able to elaborate a contemporary research topic. This includes comprehending and structuring of the topic and the available literature, preparing a talk and the ability to participate in a scientific discussion.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)
Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

talk (60 to 120 minutes)
Language of assessment: German or English
Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

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Additional information

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Workload

150 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Mathematics (2016)
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Mathematical Physics (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Mathematics (2019)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Mathematical Physics (2020)
Master's degree (1 major) Economathematics (2021)

Master's degree (1 major) Computational Mathematics (2022)
Master's degree (1 major) Mathematics (2022)
Master's degree (1 major) Mathematical Physics (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Mathematics (2023)
Master's degree (1 major) Computational Mathematics (2024)
Master's degree (1 major) Mathematics (2024)
Master's degree (1 major) Economathematics (2024)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)

Module title			Abbreviation
Advanced Seminar: Banking			12-M-SBL-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Business Management and Corporate Finance		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
10	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This seminar deals with current topics in investment and finance. Students are required to independently analyze a selected topic and to write a seminar thesis. Moreover, they are required to present, discuss and defend their thesis. The seminar may be largely literature based or empirical or may be based on independent work with formal models.

Intended learning outcomes

Students will gain in-depth knowledge in recent application areas of investment and finance. They are able to transport their knowledge in a written seminar thesis, and to present and defend it in a final talk.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English

Allocation of places

10 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Seminar: Selected Topics in Business Management and Economics			12-M-APS-161-m01

Module coordinator	Module offered by
Dean of the Faculty of Business Management and Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module serves the purpose of transferring credits from
- courses taken at other German or non-German universities
- additional courses offered on a short-term basis
- courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions)

The holders of the respective Chairs will ensure that the courses are eligible for credit transfer.

Intended learning outcomes

As a result of accrediting multiple kinds of modules, a description of acquired skills cannot be given.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English
Assessment offered: In the semester in which the course is offered

Allocation of places

15 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Advanced Seminar: Topics in Personnel Economics and Organizational Theory			12-M-SPO-161-m01
Module coordinator		**Module offered by**	
holder of the Chair for Human Resource Management and Organisation		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
10	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Students will write a seminar paper on, deliver a talk on and discuss current issues in the field of human resources management and organisation.

Intended learning outcomes

The students learn to handle, write in own words, present, and discuss current research literature in the area human resource management and organisation.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 pages) and presentation with sub-presentation including discussion (approx. 50 minutes), weighted 1:1
Language of assessment: German and/or English

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Advanced Seminar: Selected Problems in Analytical Tax Research			12-M-SSL-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Business Taxation	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In this seminar, current problems of tax research will be analysed. Usually, students will read and discuss research papers in German and/or English language.
Although the seminar will be held in German, individual seminar papers may be written and discussed in English if a participant prefers this to German.

Intended learning outcomes

After the seminar, students are able
- to analyze a complex issue in taxation using research methods,
- to identify problems and to suggest solutions,
- to formulate and to defend their analysis and suggested solutions.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English

Allocation of places

10 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)

Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title	Abbreviation
Advanced Seminar: Selected Aspects of Managerial Accounting	12-M-AUAS-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management, Controlling and Accounting	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In this course, students will acquire important knowledge and skills that will enable them to prepare a well-structured paper and to present the results of their work by means of relevant topics in the field of managerial accounting.

Intended learning outcomes

After completion of the seminar, students will be able to answer complex questions from the field of managerial accounting at a scientific level. They are able to conduct scientific literature research in a targeted manner and understand its contents as well as apply further scientific methods to answer questions, integrate acquired results into scientific papers and, building on this, independently prepare presentations and lectures.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 15 to 20 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English
Assessment offered: Once a year, summer semester

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Advanced Seminar: Financial Accounting and Auditing	12-M-SER-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Accounting	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

The module provides students with more in-depth insights into current problems of external accounting and auditing, usually using scientific primary literature in English or German language.

Intended learning outcomes

After completion of the module, participants have
(i) consolidated the learned issues and possibly applied additional techniques of scientific work;
(ii) created and defended a qualifying level relevant scientific work;
(iii) conducted a scientific examination of the work results of other seminar participants;
(iv) the ability to present and develop solution-oriented their own performance adequately considering communicative aspects.

Courses (type, number of weekly contact hours, language — if other than German)

S (2) + S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English
Assessment offered: Once a year, winter semester

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)

Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
exchange program Business Management and Economics (2022)

Module title	Abbreviation
Advanced Seminar: Public Finance	12-M-SV5-161-m01

Module coordinator	Module offered by
holder of the Chair of Public Finance	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Gaining a more in-depth understanding of specific problems discussed in lectures on public finance using scientific economic journal articles in German and English language.

Intended learning outcomes

After the seminar, students can
(i) consolidate acquired knowledge and if necessary apply additional techniques of scientific work;
(ii) create, present and defend a scientific paper;
(iii) deal with the working papers of other participants;
(iv) prepare beter for the processing of the master's thesis.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English
Assessment offered: Once a year, summer semester

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)

Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title	Abbreviation
Advanced Seminar: Monetary policy	12-M-SV1-161-m01

Module coordinator	Module offered by
holder of the Chair of Monetary Economics and International Financial Markets	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Gaining a more in-depth understanding of specific problems of macroeconomics and, in particular, monetary policy.

Format of the module: seminar

Prerequisites: Basic knowledge of macroeconomics as taught in Bachelor programs in Economics, Business or similar fields.

Usability: Master International Economic Policy

Requirements for getting credit points according to the European Credit Transfer System (ECTS): Passing the seminar

ECTS and grading: 10 ECTS, Grading on a scale from 1-5 based on a seminar presentation and a seminar paper

Frequency of the module: Each term

Workload: 300 hours

Duration: 1 Semester

Intended learning outcomes

Students are able to independently investigate and classify scientific publications on their relevance to a given theme. In addition, they are able to present the results orally and in writing by conventional scientific standards.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English

Allocation of places

10 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)

Module title	Abbreviation
Advanced Seminar: Industrial Management	12-M-SI-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Industrial Management	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In the seminar, students will write seminar papers on selected topics in the field of industrial management. The central issues and findings of these papers will have to be presented in class.

Intended learning outcomes

The students have acquired in-depth knowledge in key application areas of industrial management and learned by taking care of the seminar to deepen their knowledge for making scientific work, to research literature necessary, to filter, to evaluate, tu critically analyze and to ask each other. On this basis, and, where appropriate, with introduction of own scientifically based further developments, the participants will learn to prepare a written contribution to the topic of Industrial Management, which complies with the principles of scientific work. Through the lecture, students learn to present selected content of their housework in a suitable form and a predetermined time frame and to defend the findings in the course of a critical, scientific discussion.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes); (weighted 2:1) or
b) term paper (approx. 15 to 20 pages) and presentation (approx. 45 minutes); (weighted 1:1)
Language of assessment: German and/or English

Allocation of places

10 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)

Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Advanced Seminar: Industrial Organization			12-M-SIO-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Industrial Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
10	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This course covers selected advanced topics from the field of industrial economics. Students, with the help of their advisor, will choose a topic and formulate a research question. Then they are expected to conduct research and write a paper on this research question. At the end of the semester the students will present their findings orally to an audience.

Intended learning outcomes

After completing the course "Seminar: Industrieökonomik", students will be able to
1. perform a survey of the scientific literature on a given topic;
2. critically assess the economic models and their findings in the literature;
3. describe the economic mechanisms underlying important economic observations;
4. suggest future research directions;
5. present their findings to an audience.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English

Allocation of places

10 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)

Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title	Abbreviation
Seminar: Logistics & Supply Chain Management	12-M-LSCM-161-m01

Module coordinator	Module offered by
holder of the Chair of Logistics and Quantitative Methods	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Quantitative planning approaches are particularly valuable for designing logistics systems and supply chains. They support decision makers in taking important strategic, tactical, and operational decisions by providing well-founded and relevant information. Many of these decisions have significant impact on the competitiveness of companies because they considerably influence today's as well as tomorrow's costs and revenues. The adoption of quantitative planning methods has been strongly supported by the development of information and communication systems: Advanced tools are available at low costs, versatile methods to model and solve planning problems have been integrated in standard software, the user friendliness has improved, and last but not least: the access to necessary data has substantially progressed (i.e. through ERP systems).

Intended learning outcomes

The main objective of this seminar is to familiarize participants with diverse quantitative planning problems and potential solutions. Planning procedures are applied to solve real problems in companies. Participants in this seminar learn about actual planning problems in Logistics and Supply Chain Management; they analyze and understand how companies address these problems.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English

Allocation of places

20 places. Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Students who already have successfully completed courses offered by the Chair of Logistics and Quantitative Methods will be given preferential consideration. (2) Among applicants with the same number of successfully completed modules, places will be allocated according to the total number of ECTS credits achieved in mandatory courses of the focus Logistik und Supply Chain Management (Logistics and Supply Chain Management) or Value Chain Management or another specialisation the applicant has selected which includes courses offered by the Chair. (3) Among applicants with the same number of ECTS credits, places will be allocated by lot.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)

Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
exchange program Business Management and Economics (2022)

Module title	Abbreviation
Advanced Seminar: Marketing Strategy	12-M-MSS-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Administration and Marketing	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In this course, students will acquire important knowledge and skills that will enable them to prepare a well-structured paper and to present the results of their work with the help of relevant topics in the fields of strategic marketing and strategic management.

Reading:
will vary according to topic

Intended learning outcomes

After completing the course "Marketing Strategie", students will be able to
1. understand the fundamentals of scientific literature reviews;
2. integrate elaborated content in a scientific thesis;
3. create presentations independently.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English

Allocation of places

10 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)

Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Advanced Seminar: Entrepreneurship and Management			12-M-SAS-161-m01

Module coordinator	Module offered by
holder of the Chair of Entrepreneurship and Strategy	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

Students develop seminar papers on varying topics in the domain of entrepreneurship, strategy, and innovation and present the key insights from their work.

Intended learning outcomes

Educational aims

- Enable students to position their research
- Enable students to critically review a substantial body of literature in short time
- Enable students to develop a sound theoretical framework
- Enable students to create a research paper fully meeting academic standards

Learning outcomes

On successful completion of this module students will be able to:

- Differentiate their research from previous work
- Adopt theoretical perspectives to understand complex phenomena
- Engage in comprehensive academic reasoning
- Articulate abstract and complex phenomena and relationships in written and oral form

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 pages) and presentation (approx. 15 to 30 minutes), weighted 2:1
Language of assessment: German and/or English
Assessment offered: Once a year, winter semester

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)

Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Advanced Seminar: Economic Order and Social Policy			12-M-SWOSP-161-m01

Module coordinator	Module offered by
holder of the Chair of Labour Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This seminar targets any students interested in acquiring the skills to conduct an empirical study to understand people's social behavior and social preferences. We will read and discuss scientific methodological papers that allow students to acquire the necessary empirical tools to conduct an empirical thesis.

The recurring topic will be related to the origins of social cohesion and social preferences, the role of the family and the school in shaping children's social behavior and preferences.

Intended learning outcomes

This seminar is designed to acquire the skills to write a master thesis at the Chair of Labour Economics. It focuses on the acquisition of empirical tools - mostly related to experimental empirical tools - in order to understand the determinants of social behavior and preferences.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English

Allocation of places

10 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Advanced Seminar: Econometrics			12-M-SOE-161-m01
Module coordinator		**Module offered by**	
holder of the Chair of Econometrics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
10	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module will take the form of a seminar and will cover advanced topics in econometrics. Students will be required to independently familiarise themselves with the respective topics and to present the results of their work both in a seminar paper and orally during a seminar session.

Intended learning outcomes

Students are able to analyze independently academic publications on their relevance for a given theme. They can present the results orally and in writing by conventional scientific standards.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English

Allocation of places

10 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Economic and Business Ethics	12-M-WUE-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Business Taxation	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In this seminar, students will gain an overview of different ethical aspects in business and economy, e. g. leadership ethics, corruption, ethcial theories, consumer ethics, CSR.

Intended learning outcomes

Using common scientific methods the student should be able to write a seminar paper dealing with a selected ethcial problem in business and/or economiy. He/she should be able to present a complex problem in an clear and understandable way und he/she should discuss the arguments with other participants in the class.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English

Allocation of places

12 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Econmathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)

Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Seminar: Macroeconomics and Quantitative Economic Research			12-M-MEW-161-m01
Module coordinator			**Module offered by**
head of the Work Group of Empirical Economics			Faculty of Management and Economics
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
10	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This course will provide students with a more in-depth understanding of specific problems of macroeconomics and quantitative economic research. A current list of topics, from which students may select one, is available on my website.

Intended learning outcomes

After the seminar, students can
(i) consolidate acquired knowledge and if necessary apply additional techniques of scientific work;
(ii) create, present and defend a scientific paper;
(iii) deal with the working papers of other participants;
(iv) prepare beter for the processing of the master's thesis.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English

Allocation of places

10 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)

Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Seminar: Supply Chain Competition			12-M-SCC-161-m01

Module coordinator	Module offered by
holder of the Chair of Logistics and Quantitative Methods	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In the seminar "Supply Chain Competition", students participate in an online multi-round simulation and apply methods of operations and supply chain management.

Intended learning outcomes

After completing this seminar students

i. selected and applied quantitative models for procurement, production, sales and supply chain management,
ii. faced the practical problems when using real data to feed models,
iii. and understand the challenges to reach a coordinated decision in a company.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 15 to 20 pages) and presentation (approx. 10 minutes), weighted 2:1
Language of assessment: German and/or English
Assessment offered: Once a year, winter semester

Allocation of places

12 places. Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Students who already have successfully completed courses offered by the Chair of Logistics and Quantitative Methods will be given preferential consideration. (2) Among applicants with the same number of successfully completed modules, places will be allocated according to the total number of ECTS credits achieved in mandatory courses of the focus Logistik und Supply Chain Management (Logistics and Supply Chain Management) or Value Chain Management or another specialisation the applicant has selected which includes courses offered by the Chair. (3) Among applicants with the same number of ECTS credits, places will be allocated by lot.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)

Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Seminar: E-Business Strategies			12-M-SEBS-161-m01

Module coordinator	Module offered by
holder of the Chair of Information Systems Engineering	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In this course, students will acquire important knowledge and skills that will enable them to prepare a well-structured term paper and to present the results of their work with the help of relevant topics in the fields of web-based platforms (electronic markets, Web 2.0 etc.) and strategic management of a company.

Intended learning outcomes

- Academic literature review

- Integration of developed results in scientific papers

- Creating presentations and talks

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English
Assessment offered: Once a year, winter semester

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) Information Systems (2019)

Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Information Systems (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Business Analytics			12-M-BUA-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Analytics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In this course, students will acquire important knowledge and skills that will enable them to prepare a well-structured term paper and to present the results of their work with the help of relevant topics in the field of business management decision models and methods and their application in the development of decision-support systems as well as analytical information systems and quantitative methods of data analysis.

Students work on current topics using methods from machine learning, mathematical optimization and simulation.

Intended learning outcomes

The module provides students with knowledge of:
- Scientific literature
- Implementation of methods in code
- Integration of developed results in scientific papers
- Creating presentations and lectures

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English
Assessment offered: Once a year, winter semester

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)

Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)
Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Information Systems (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)

Module title	Abbreviation
Advanced Seminar: Advanced Topics in Contract Theory	12-M-ATC-161-m01

Module coordinator	Module offered by
holder of the Chair for Economics, Contract Theory and Information Economics	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

This module covers varying classical or recent topics from microeconomics, usually with a focus on decision theory, contract theory or behavioral economics. As a solid understanding of the corresponding basics will be helpful, the course is intended in particular for advanced students who completed the classes "Advanced Micoeconomics" and "Contract Theory".

Intended learning outcomes

After completing the course students will have gathered experience in
- reading and understanding theoretical or experimental research articles,
- critically analyzing and discussing the results of research articles,
- relating the results of different research articles to each other,
- conveying their insights both verbally and in writing in accordance with common scientific standards.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 15 pages) and presentation (approx. 30 minutes), weighted 2:1
Language of assessment: German and/or English

Allocation of places

15 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title	Abbreviation
Advanced Seminar: Enterprise Systems	12-M-ES-161-m01

Module coordinator	Module offered by
holder of the Chair of Business Management and Business Information Systems	Faculty of Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--

Duration	Module level	Other prerequisites
1 semester	graduate	--

Contents

In this course, students will acquire important knowledge and skills that will enable them to prepare a well-structured term paper and to present the results of their work with the help of relevant topics in the fields of information systems and enterprise systems.

Reading:
will vary according to topic

Intended learning outcomes

After completing the course "Enterprise Systems", students will be able to
1. understand the fundamentals of scientific literature reviews;
2. integrate elaborated content in a scientific thesis;
3. create presentations independently.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Information Systems (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Master's degree (1 major) Management (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Information Systems (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)

Module title			Abbreviation
Philosophy of Science and Ethics in Business Management and Economics			12-M-WEW-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
10	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module will take the form of a seminar. Participants will independently work on a problem in economic policy or will review an important publication on a topic in economics.

Intended learning outcomes

Students are able to present the status of a current project in a talk as well as to discuss and defend it.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English
creditable for bonus

Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Module title			Abbreviation
Seminar: International Economics			12-M-SIÖ-161-m01
Module coordinator		**Module offered by**	
Dean of the Faculty of Business Management and Economics		Faculty of Management and Economics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
10	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

Content:
Current topics in international economics and economic geography [e.g. Urbanization and Inequality; Tasks, Trade, and Cities; Outsourcing, Offshoring and Multinational Firms; Competition of Locations, Jurisdictions and Systems; Globalization and the Environment; Trade, Multinational Firms and Labor Markets; Triumph of the City]

Literature:
Peer-reviewed articles and/or monographs.

Intended learning outcomes

Drawing on current cutting-edge research, students are enabled to analyze current research questions and to learn and apply research methods. The seminar style of the course teaches them to present their own seminar papers and research both in written and in oral form. Students are enabled to critically analyze and discuss the work of their peers.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 pages) and presentation (approx. 40 minutes) with position paper (1 page), weighted 3:1
Language of assessment: German and/or English

Allocation of places

10 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)

Module title			Abbreviation
Seminar: Applied Decision Theory			12-M-SCT-161-m01
Module coordinator			**Module offered by**
holder of the Chair for Economics, Contract Theory and Information Economics			Faculty of Management and Economics
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
5	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	--	

Contents

This module covers varying classical or recent topics from microeconomics, usually with a focus on decision theory, contract theory or behavioral economics. As a solid understanding of the corresponding basics will be helpful, the course is intended in particular for advanced students who completed the classes "Ökonomische Grundlagen des Risikomanagements/Ökonomische Theorie des Risikos" and "Informationsökonomik".

Intended learning outcomes

After completing the course students will have gathered experience in (i) reading and understanding theoretical or experimental research articles, (ii) critically analyzing and discussing the results of research articles, (iii) relating the results of different research articles to each other, (iv) conveying their insights both verbally and in writing in accordance with common scientific standards.

Courses (type, number of weekly contact hours, language — if other than German)

S (2)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

term paper (approx. 20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1
Language of assessment: German and/or English
Assessment offered: Once a year, winter semester

Allocation of places

10 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Business Management (2015)
Master's degree (1 major) China Business and Economics (2016)
Master's degree (1 major) International Economic Policy (2015)
Master's degree (1 major) China Language and Economy (2016)

Thesis

(30 ECTS credits)

Module title			Abbreviation
Master Thesis Economathematics			10-M=MAAW-161-m01
Module coordinator		**Module offered by**	
Dean of Studies Mathematik (Mathematics)		Institute of Mathematics	
ECTS	**Method of grading**	**Only after succ. compl. of module(s)**	
30	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	graduate	The supervisor may make the successful completion of certain modules that are relevant for the respective topic a prerequisite for the assignment of the topic.	

Contents

Independently researching and writing on a (potentially interdisciplinary) topic in mathematics and/or economics selected in consultation with the supervisor.

Intended learning outcomes

The student is able to work independently on a given topic in business mathematics and apply the skills and methods obtained during his/her studies in the master programme. He/She can write down the result of his/her work in a suitable form.

Courses (type, number of weekly contact hours, language — if other than German)

No courses assigned to module

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

Master's thesis (750 to 900 hours total)
Registration and assignment of topic in consultation with supervisor.
Language of assessment: German or English

Allocation of places

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Additional information

Time to complete: 6 months

Workload

900 h

Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Economathematics (2016)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Economathematics (2022)
Master's degree (1 major) Economathematics (2024)
Master's degree (1 major) Economathematics (2025)