Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Computational Mathematics as a Master's with 1 major

with the degree "Master of Science" (120 ECTS credits)

Responsible: Institute of Mathematics

Examination regulations version: 2012

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 for the modules in this SFB:

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

Information on assessment procedures:

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 a 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:

ASPO2009

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

12-Jul-2012 (2012-106)

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.

Every module will be described using the following form:

Abbreviation	**Module title**							
	ECTS		Duration	(in semesters)	Method of grading		Module level	
	Courses	To be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y						
	Method of assessment							
	Only after successful completion of	if applicable						
	Other prerequisites	if applicable						
	Participants and allocation of places	if applicable						
	Additional information	if applicable						
	Referred to in LPO I	if applicable (examination regulations for teaching-degree programmes)						

Compulsory Electives (90 ECTS credits)								
Compulsory Electives Mathematics								
Applied Mathematics								
10-M=V-KOM-122-m01	**Mathematical Continuum Mechanics**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (60 to 90 minutes), b) oral examination of one candidate each (approx. 15 minutes), c) oral examination in groups (groups of 2, approx. 20 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English						
	other prerequisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.						
10-M=AAAN-102-m01	**Applied Analysis**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English						
	other prerequisites	Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.						

10-M=ANG-G-102-m01	**Numeric of large Systems of Equations**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
10-M=AOP-T-102-m01	**Basics of Optimization**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

10-M=VN-PE-102-m01	**Numeric of Partial Differential Equations**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
10-M=VOP-T-102-m01	**Selected Topics in Optimization**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

10-M=VMPH-102-m01	**Selected Topics in Mathematical Physics**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (60 to 90 minutes), b) oral examination of one candidate each (approx. 15 minutes), c) oral examination in groups (groups of 2, approx. 20 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
10-M=VOST-102-m01	**Optimal Control**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (60 to 90 minutes), b) oral examination of one candidate each (approx. 15 minutes), c) oral examination in groups (groups of 2, approx. 20 minutes) Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

Mathematics								
10-M=VA-NA-122-m01	**Selected Topics in Analysis**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (approx. 90 to 120 minutes; usually chosen), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups of 2 candidates (approx. 30 minutes total) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
10-M=VGP-C-122-m01	**Giovanni-Prodi Lecture Selected Topics (Master)**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (approx. 90 to 120 minutes; usually chosen), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups of 2 candidates (approx. 30 minutes total) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: English, German if agreed upon with the examiner					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
10-M=ELT-CM-122-m01	**Learning by Teaching Computational Mathematics**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		practical examination (approx. 90 minutes) Language of assessment: German, English					

10-M=ARTH-102-m01	**Introduction to Control Theory**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 90 to 120 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German or English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
10-M=AAL-G-102-m01	**Topics in Algebra**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

10-M=ADG-M-102-m01	**Differential Geometry**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
10-M=AFT-H-102-m01	**Complex Analysis**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

10-M=AGMS-102-m01	**Geometric Structures**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
10-M=ALTH-102-m01	**Lie Theory**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

10-M=AST-P-102-m01	**Stochastical Processes**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
10-M=A-TOP-102-m01	**Topology**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

10-M=AZTH-102-m01	**Number Theory**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
10-M=AGP-C-102-m01	**Giovanni-Prodi Lecture (Master)**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (60 to 90 minutes), b) oral examination of one candidate each (approx. 15 minutes), c) oral examination in groups (groups of 2, approx. 20 minutes) Language of assessment: English, German if agreed upon with the examiner					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

10-M=VGDS-102-m01	**Groups and their Representations**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (approx. 90 to 120 minutes; usually chosen), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups of 2 candidates (approx. 30 minutes total) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
10-M=VDS-R-102-m01	**Dynamical Systems and Control**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (60 to 90 minutes), b) oral examination of one candidate each (approx. 15 minutes), c) oral examination in groups (groups of 2, approx. 20 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

10-M=VMB-V-102-m01	**Mathematical Imaging**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (60 to 90 minutes), b) oral examination of one candidate each (approx. 15 minutes), c) oral examination in groups (groups of 2, approx. 20 minutes) Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
10-M=V-NAN-102-m01	**Non-Linear Analysis**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (60 to 90 minutes), b) oral examination of one candidate each (approx. 15 minutes), c) oral examination in groups (groups of 2, approx. 20 minutes) Language of assessment: German, English					
	other prerequisites		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

Workshops and Seminars								
10-M=GMN-W-122-m01	**Study Group Mathematics in the Sciences**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one or two of the following methods of assessment: a) seminar presentation (approx. 60 to 120 minutes), b) written elaboration of contents equivalent to a seminar presentation of approx. 60 to 120 minutes, c) written examination (approx. 90 to 120 minutes), d) oral examination of one candidate each (approx. 20 minutes), e) oral examination in groups of 2 candidates (approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English					
	other prerequisites		Registration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Some seminars or workshops might only be open for students with previous knowledge and/or skills in certain areas. Where applicable, details will be specified in the class schedule.					
10-M=SMN-W-122-m01	**Seminar in Mathematics in the Sciences**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one or two of the following methods of assessment: a) seminar presentation (approx. 60 to 120 minutes), b) written elaboration of contents equivalent to a seminar presentation of approx. 60 to 90 minutes Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English					
	other prerequisites		Registration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Some seminars or workshops might only be open for students with previous knowledge and/or skills in certain areas. Where applicable, details will be specified in the class schedule.					
10-M=GN-MA-102-m01	**Study Group Numerical Mathematics and Applied Analysis**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one or two of the following methods of assessment: a) seminar presentation (approx. 60 to 120 minutes), b) written elaboration of contents equivalent to a seminar presentation of approx. 60 to 120 minutes, c) written examination (approx. 90 to 120 minutes), d) oral examination of one candidate each (approx. 20 minutes), e) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Registration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Some seminars or workshops might only be open for students with previous knowledge and/or skills in certain areas. Where applicable, details will be specified in the class schedule.					

10-M=GRO-K-102-m01	**Study Group Robotic, Optimization and Control Theory**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one or two of the following methods of assessment: a) seminar presentation (approx. 60 to 120 minutes), b) written elaboration of contents equivalent to a seminar presentation of approx. 60 to 120 minutes, c) written examination (approx. 90 to 120 minutes), d) oral examination of one candidate each (approx. 20 minutes), e) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Registration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Some seminars or workshops might only be open for students with previous knowledge and/or skills in certain areas. Where applicable, details will be specified in the class schedule.					
10-M=SGP-C-102-m01	**Giovanni-Prodi Seminar (Master)**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one or two of the following methods of assessment: a) seminar presentation (approx. 60 to 120 minutes), b) written elaboration of contents equivalent to a seminar presentation of approx. 60 to 90 minutes Language of assessment: English, German if agreed upon with the examiner					
	other prerequisites		Registration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Some seminars or workshops might only be open for students with previous knowledge and/or skills in certain areas. Where applicable, details will be specified in the class schedule.					
10-M=SID-Z-102-m01	**Interdisciplinary Seminar**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		At the beginning of the course, the lecturer will choose one or two of the following methods of assessment: a) seminar presentation (approx. 60 to 120 minutes), b) written elaboration of contents equivalent to a seminar presentation of approx. 60 to 90 minutes Language of assessment: German, English					
	other prerequisites		Registration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Some seminars or workshops might only be open for students with previous knowledge and/or skills in certain areas. Where applicable, details will be specified in the class schedule.					

10-M=SN-MA-102-m01	**Seminar in Numerical Mathematics and Applied Analysis**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	At the beginning of the course, the lecturer will choose one or two of the following methods of assessment: a) seminar presentation (approx. 60 to 120 minutes), b) written elaboration of contents equivalent to a seminar presentation of approx. 60 to 90 minutes Language of assessment: German, English						
	other prerequisites	Registration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Some seminars or workshops might only be open for students with previous knowledge and/or skills in certain areas. Where applicable, details will be specified in the class schedule.						
10-M=SOP-T-102-m01	**Seminar in Optimization**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	At the beginning of the course, the lecturer will choose one or two of the following methods of assessment: a) seminar presentation (approx. 60 to 120 minutes), b) written elaboration of contents equivalent to a seminar presentation of approx. 60 to 90 minutes Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English						
	other prerequisites	Registration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Some seminars or workshops might only be open for students with previous knowledge and/or skills in certain areas. Where applicable, details will be specified in the class schedule.						
Application-oriented Subject								
Application-oriented Subject Biology								
Topics: Bioinformatics								
07-MBI-B-121-m01	**Bioinformatics B**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	V (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	Students will be informed about the method, length and scope of the assessment prior to the course. a) written examination (30 to 60 minutes, including multiple choice questions) or b) oral examination of one candidate each (30 to 60 minutes) or c) oral examination in groups of up to 3 candidates (30 to 60 minutes)						
07-MS2BI-102-m01	**Bioinformatics (Lecture and Seminar)**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S + V (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	Students will be informed about the method, length and scope of the assessment prior to the course. Usually, one of the following options will be chosen: a) written examination (30 to 60 minutes, including multiple choice questions) or b) oral examination of one candidate each (30 to 60 minutes) or c) oral examination in groups of up to 3 candidates (approx. 30 to 60 minutes)						

07-MS2BIF1-102-m01	**Bioinformatics (Practical Course and Seminar 1)**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		Students will be informed about the length and scope of the assessment prior to the course. Usually, one of the following options will be chosen: a) written examination (30 to 60 minutes, including multiple choice questions) or b) log (approx. 10 to 30 pages) or c) oral examination of one candidate each (30 to 60 minutes) or d) oral examination in groups of up to 3 candidates (approx. 30 to 60 minutes) or e) presentation (20 to 45 minutes)					
07-MS2BIF2-102-m01	**Bioinformatics (Practical Course and Seminar 2)**							
	ECTS	15	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		S + P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		Students will be informed about the length and scope of the assessment prior to the course. Usually, one of the following options will be chosen: a) written examination (30 to 60 minutes, including multiple choice questions) or b) log (approx. 10 to 30 pages) or c) oral examination of one candidate each (30 to 60 minutes) or d) oral examination in groups of up to 3 candidates (approx. 30 to 60 minutes) or e) presentation (20 to 45 minutes)					
	other prerequisites		Admission prerequisite to assessment: regular attendance of lab course and successful completion of the respective exercises as specified at the beginning of the course.					
Topics: System Biology								
07-MS-B-121-m01	**Systems Biology B**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		Students will be informed about the method, length and scope of the assessment prior to the course. a) written examination (30 to 60 minutes, including multiple choice questions) or b) oral examination of one candidate each (30 to 60 minutes) or c) oral examination in groups of up to 3 candidates (30 to 60 minutes)					
07-MS3S-102-m01	**System Biology (Lecture and Seminar)**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		Students will be informed about the method, length and scope of the assessment prior to the course. Usually, one of the following options will be chosen: a) written examination (30 to 60 minutes, including multiple choice questions) or b) oral examination of one candidate each (30 to 60 minutes) or c) oral examination in groups of up to 3 candidates (approx. 30 to 60 minutes)					
07-MS3SYF1-102-m01	**System Biology (Practical Course and Seminar 1)**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P + S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		Students will be informed about the length and scope of the assessment prior to the course. Usually, one of the following options will be chosen: a) written examination (30 to 60 minutes, including multiple choice questions) or b) log (approx. 10 to 30 pages) or c) oral examination of one candidate each (30 to 60 minutes) or d) oral examination in groups of up to 3 candidates (approx. 30 to 60 minutes) or e) presentation (20 to 45 minutes)					

07-MS3SYF2-102-m01	**System Biology (Practical Course and Seminar 2)**							
	ECTS	15	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P + S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		Students will be informed about the length and scope of the assessment prior to the course. Usually, one of the following options will be chosen: a) written examination (30 to 60 minutes, including multiple choice questions) or b) log (approx. 10 to 30 pages) or c) oral examination of one candidate each (30 to 60 minutes) or d) oral examination in groups of up to 3 candidates (approx. 30 to 60 minutes) or e) presentation (20 to 45 minutes)					
	other prerequisites		Admission prerequisite to assessment: regular attendance of lab course and successful completion of the respective exercises as specified at the beginning of the course.					
Application-oriented Subject Chemistry								
Theoretical Chemistry								
08-TCM2-102-m01	**Computational Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					
08-TCM1-102-m01	**Theoretical Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					
08-TCM3-102-m01	**Programming in Theoretical Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		completion and discussion of approx. 5 programming exercises as well as talk (approx. 45 minutes) Language of assessment: German or English					

08-TCAP-102-m01	**Theoretical Chemistry - Project work**							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	This module has 3 components; information on courses listed separately for each component. • 08-TCAP-1-102: P (no information on language and number of weekly contact hours available) • 08-TCAP-2-102: P (no information on language and number of weekly contact hours available) • 08-TCAP-3-102: P (no information on language and number of weekly contact hours available)						
	Method of assessment	This module has the following 3 assessment components. To pass the module as a whole students must pass two out of these three assessment components. **Assessment component to module component 08-TCAP-1-102:** Theoretische Chemie Arbeitsgruppenpraktikum Wellenpaketdynamik • 5 ECTS credits, method of grading: (not) successfully completed • presentation (approx. 30 minutes) • Language of assessment: German or English **Assessment component to module component 08-TCAP-2-102:** Theoretische Chemie Arbeitsgruppenpraktikum Wellenfunktionsmethoden • 5 ECTS credits, method of grading: (not) successfully completed • presentation (approx. 30 minutes) • Language of assessment: German or English **Assessment component to module component 08-TCAP-3-102:** Theoretische Chemie Arbeitsgruppenpraktikum Dichtefunktionaltheorie • 5 ECTS credits, method of grading: (not) successfully completed • presentation (approx. 30 minutes) • Language of assessment: German or English						
	Additional Information	Additional information on module duration: 4 weeks..						
Physical Chemistry								
08-PCM1-102-m01	**Advanced Physical Chemistry**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	This module comprises 2 module components. Information on courses will be listed separately for each module component. • 08-PCM1-1-102: S + Ü (no information on SWS (weekly contact hours) and course language available) • 08-PCM1-2-102: P (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments. **Assessment in module component 08-PCM1-1-102:** Laser Spectroscopy Laser Spectroscopy • 5 ECTS, Method of grading: numerical grade • written examination (90 minutes) or oral examination (20 minutes) • Language of assessment: German or English **Assessment in module component 08-PCM1-2-102:** Advanced Physical Chemistry (Lab) • 5 ECTS, Method of grading: (not) successfully completed • Vortestate (pre-experiment exams) and Nachtestate (post-experiment exams) (approx. 15 minutes), log (approx. 15 pages) • Language of assessment: German or English						

08-PCM2-102-m01	**Chemical Dynamics**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English					
08-PCM3-102-m01	**Nanoscale Materials**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English					
08-PCM4-102-m01	**Ultrafast spectroscopy and quantum-control**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English					
08-PCM5-102-m01	**Physical chemistry of supramolecular assemblies**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) and/or oral examination of one candidate each (20 minutes) and/or talk (30 minutes) Language of assessment: German or English					
08-PCM6-102-m01	**Physical Chemistry (Advanced Lab)**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		presentation (20 minutes) Language of assessment: German or English					
Application-oriented Subject Medicine								
03-Ma-Med1-122-m01	**Applied Mathematics and Medicine**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		talk (approx. 60 to 120 minutes) Language of assessment: German, English					
03-Ma-Med2-122-m01	**Practical Research Course Medicine and Computational Mathematics**							
	ECTS	15	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		talk (approx. 60 to 120 minutes) and project report (approx. 10 to 20 pages) Language of assessment: German, English					

Application-oriented Subject Computer Science								
10-I-AGT-122-m01	**Algorithmic Graph Theory**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: English, German if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					
10-I-DB-102-m01	**Databases**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes) if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).					
	Referred to in LPO I		§ 49 (1) 1. b) Datenbanksysteme und Softwaretechnologie § 69 (1) 1. b) Datenbanksysteme und Softwaretechnologie					
10-I-WBS-102-m01	**Knowledge-based Systems**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes) if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
10-I-DM-102-m01	**Data Mining**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).					

10-I-KT-102-m01	**Theory of Complexity**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).					
10-I-AR-102-m01	**Automation and Control Technology**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).					
10-I-RK-102-m01	**Computer Networks and Communication Systems**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).					
10-I=KI-102-m01	**Artificial Intelligence**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 80 to 90 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					

10-I=EL-102-m01	**E-Learning**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					
10-I=MI-102-m01	**Medical Informatics**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					
10-I=DDB-102-m01	**Deductive Databases**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					
10-I=DB2-102-m01	**Databases II**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					

10-I=ST-102-m01	**Simulation Techniques for Performance Evaluation**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					
10-I=KT2-102-m01	**Advanced Topics in Computational Complexity**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					
10-I=KD-102-m01	**Cryptography and Data Security**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					
10-I=AG-102-m01	**Computational Geometry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					

10-I=APA-102-m01	**Approximation Algorithms**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					
10-I=A-GIS-102-m01	**Algorithms for Geographic Information Systems**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					
10-I=CB-102-m01	**Compiler Construction**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					
10-I=PA-102-m01	**Program Design and Analysis**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					

10-I=RAM-102-m01	**Computer Arithmetic**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					
10-I=AUT-102-m01	**Automata Theory**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).					
10-I=BER-102-m01	**Computability Theory**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).					
10-I=ML-102-m01	**Mathematical Logic**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).					

Application-oriented Subject Aerospace Computer Science								
10-I-AR-102-m01	**Automation and Control Technology**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).					
10-I-RAK-102-m01	**Computer Architecture**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).					
	Referred to in LPO I		§ 69 (1) 1. c) Informatik Technische Informatik					
10-I-RK-102-m01	**Computer Networks and Communication Systems**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).					
10-I=ES-102-m01	**Embedded Systems**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					

10-I=RO-102-m01	**Robotics**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					
10-I=SSD-102-m01	**Spacecraft Systems Design**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					
10-I=AA-102-m01	**Advanced Automation**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					
10-I=RO2-102-m01	**Robotics II: Networked Robots**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).					

Application-oriented Subject Physics								
Solid State Physics and Nanostructures (Experiment)								
11-HLF-092-m01	**Semiconductor Lasers - Principles and Current Research**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
11-FK2-092-m01	**Solid State Physics 2**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

11-FKS-092-m01	**Solid State Spectroscopy**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
11-HLP-092-m01	**Semiconductor Physics**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

11-HNS-092-m01	**Semiconductor Nanostructures**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
11-SPD-102-m01	**Semiconductor Physics and Devices**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + R (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 90 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

Astrophysics and Particle Physics (Experiment)								
11-A4-072-m01	**Astrophysics**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + S (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (approx. 120 minutes)						
	other prerequisites	Admission prerequisite to assessment: successful completion of approx. 50% of exercises. Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.						
	Participants and allocation of places	Only as part of pool of general key skills (ASQ): 15 places. Places will be allocated by lot.						
11-AWP-092-m01	**Atmosphere and Space Physics**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	R + V (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German or English						
	other prerequisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.						

11-TPE-092-m01	**Experimental Particle Physics**							
	ECTS	4	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
11-TPS-092-m01	**Particle Physics (Standard Model)**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

Complex Systems, Quantum Control and Biophysics (Experiment)								
11-SDC-092-m01	**Statistics, Data Analysis and Computer Physics**							
	ECTS	4	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
Solid State Physics and Nanostructures (Theory)								
11-QM2-092-m01	**Quantum Mechanics II**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

11-TFK-092-m01	**Theoretical Solid State Physics**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
11-TSL-092-m01	**Theory of Superconduction**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

Astrophysics and Particle Physics (Theory)								
11-EPP-092-m01	**Introduction to Plasmaphysics**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + R (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
11-AKM-092-m01	**Cosmology**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

11-APL-092-m01	**Plasma-Astrophysics**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
11-ASP-092-m01	**Introduction to Space Physics**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

11-GRT-092-m01	**Group Theory**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
11-RNT-092-m01	**Renormalization Theory**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

11-RQFT-092-m01	**Relativistical Quantumfield Theory**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
11-RTT-092-m01	**Theory of Relativity**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

11-TEP-092-m01	**Theoretical Elementary Particle Physics**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
11-SUS-092-m01	**Supersymmetry I and II**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + R (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					

11-NMA-111-m01	**Computational Astrophysics**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + R (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English					
	other prerequisites		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.					
Thesis (30 ECTS credits)								
10-M=MACM-102-m01	**Master Thesis Computational Mathematics**							
	ECTS	30	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		no courses assigned					
	Method of assessment		written thesis Language of assessment: German, English					
	other prerequisites		Registration for assessment and assignment of topic in consultation with supervisor. 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.					