

# Module Catalogue

for the Subject

## Digital Humanities

as a minor in a Bachelor's degree programme

(60 ECTS credits)

Examination regulations version: 2024

Responsible: Faculty of Arts, Historical, Philological, Cultural and Geographical  
Studies

Responsible: Chair of Digital Humanities and German Literature of the Modern  
Period

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## The subject is divided into

section / sub-section	ECTS credits	starting page
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## Learning Outcomes

German contents and learning outcome available but not translated yet.

### Fachliche Ziele

- Die Absolventinnen und Absolventen haben ein solides Überblickswissen über die Grundprinzipien der Digital Humanities, sie können inhaltliche Strukturen von Texten beschreiben und mittels standardisierter Auszeichnungssprachen kodieren, sie kennen zentrale Begriffe und Konzepte der Datenmodellierung und haben die Fähigkeit, diese selbständig zu verwenden.
- Die Absolventinnen und Absolventen verfügen über ein solides Grundwissen in der algorithmischen Prozessierung und der Anwendung von mindestens zwei Programmiersprachen.
- Die Absolventinnen und Absolventen haben geistes- und kulturwissenschaftliche Grundkenntnisse, die weit über das zweite BA-Fach hinausgehen, sowie die Fähigkeit, digitale Ressourcen zu erstellen, zu bearbeiten und zur Beantwortung fachspezifischer Fragen heranzuziehen.
- Die Absolventinnen und Absolventen verfügen über eine vertiefte Kenntnis ausgewählter Forschungsmethoden der Digital Humanities und die Fähigkeit, fachspezifische Fragestellungen so zu operationalisieren, dass sie mit digitalen Bibliotheken und Informationssystemen beantwortet werden können.

### Befähigung, eine qualifizierte Erwerbstätigkeit aufzunehmen

- Die Absolventinnen und Absolventen besitzen die Fähigkeit, Fragestellungen der Digital Humanities zu analysieren, Verfahren zu deren Lösung zu entwickeln und in entsprechenden Arbeitsschritten umzusetzen.
- Die Absolventinnen und Absolventen können statistische Verfahren zur Lösung geistes- oder kulturwissenschaftlicher Fragestellungen heranzuziehen.
- Die Absolventinnen und Absolventen kennen die apparativen, personellen und organisatorischen Notwendigkeiten eines Digitalisierungsprojektes.
- Die Absolventinnen und Absolventen besitzen die Fähigkeit, Problemzusammenhänge in mündlicher wie schriftlicher Form sachgerecht aufzubereiten und - unter Medieneinsatz - zielgruppenspezifisch zu vermitteln.

### Befähigung zum gesellschaftlichen Engagement

- Die Absolventinnen und Absolventen können gesellschaftliche und kulturelle Entwicklungen, Themen und Positionen in ihrer sprachlichen Verfasstheit und darüber hinaus reflektieren und analysieren. Sie sind in der Lage, sich in einer zunehmend komplexer werdenden Welt zu orientieren und eine Wertvorstellung für das eigene Denken und Handeln zu entwickeln.
- Die Absolventinnen und Absolventen sind in der Lage, geistes- und kulturwissenschaftliche Fragestellungen in die andere Diskurswelt der Informatik zu transferieren. Diese Vermittlerrolle trägt dazu bei, die eigene soziale, kulturgeschichtliche wie geschlechtliche Herkunft kritisch zu reflektieren.

### Persönlichkeitsentwicklung

- Die Absolventinnen und Absolventen sind zur selbstständigen und kritischen Reflexion in der Lage und haben gelernt, ihre eigene Position im Dialog mit anderen zu finden, schriftlich und mündlich zu präsentieren und selbstkritisch zu hinterfragen.

## Abbreviations used

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

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

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

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

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

## Conventions

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

## Notes

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

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

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

## In accordance with

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

**ASPO2015**

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

**17-Apr-2024 (2024-52)**

**21-May-2025 (2025-45)**

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

## Compulsory Courses

(55 ECTS credits)

Module title		Abbreviation
Digital Humanities in Overview		04-DH-A1-152-m01
Module coordinator		Module offered by
holder of the Chair of Digital Humanities and German Literature of the Modern Period		Chair of Digital Humanities and German Literature of the Modern Period
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Overview of the discipline of digital humanities with a focus on abstraction, formalisation and data modelling as well as text encoding, the digital library and applications in the humanities.		
Intended learning outcomes		
Students are familiar with the core principles of digital humanities and have gained an overview of the discipline.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (2) + T (2) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
written examination (approx. 60 minutes) Language of assessment: German and/or English		
Allocation of places		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
Teaching cycle: every winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Master's degree (1 major) Media Communication (2015) Bachelor's degree (1 major, 1 minor) Pre- and Protohistoric Archaeology (2015) Bachelor's degree (1 major, 1 minor) Pre- and Protohistoric Archaeology (Minor, 2015) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2015) Bachelor's degree (2 majors) Pre- and Protohistoric Archaeology (2015) Bachelor's degree (2 majors) Digital Humanities (2015) Master's degree (1 major) General and Applied Linguistics (2016) Master's degree (1 major) Media Communication (2016) Bachelor's degree (1 major, 1 minor) Digital Humanities (2016) Master's degree (1 major) Media Communication (2018) Bachelor's degree (2 majors) Classical Archaeology (2018) Bachelor's degree (1 major, 1 minor) Classical Archaeology (2018) Bachelor's degree (1 major, 1 minor) Digital Humanities (2018)		
minor in a Bachelor's degree programme Digital Humanities (2024)	JMU Würzburg • generated 18-Jun-2025 • exam. reg. data record Bachelor (60 ECTS) Digital Humanities - 2024	page 7 / 25

Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2018)  
 Bachelor's degree (2 majors) Digital Humanities (2018)  
 Master's degree (1 major) Media Communication (2019)  
 Bachelor's degree (1 major, 1 minor) European Ethnology (Minor, 2020)  
 Bachelor's degree (2 majors) European Ethnology (2020)  
 Bachelor's degree (1 major, 1 minor) Auxiliary Sciences of History (Minor, 2021)  
 Bachelor's degree (2 majors) Ancient Near Eastern Archaeology (2022)  
 Master's degree (1 major) Media Entertainment (2022)  
 Master's degree (1 major) Psychology of digital media (2022)  
 Master's degree (1 major) General and Applied Linguistics (2022)  
 Bachelor's degree (1 major) Franco-German studies: language, culture, digital competence (2022)  
 Bachelor's degree (2 majors) European Ethnology/Empiric Cultural Studies (2023)  
 Bachelor's degree (1 major, 1 minor) European Ethnology/Empiric Cultural Studies (Minor, 2023)  
 Bachelor's degree (1 major) Indology/South Asian Studies (2024)  
 Bachelor's degree (1 major, 1 minor) Indology/South Asian Studies (2024)  
 Bachelor's degree (2 majors) Digital Humanities (2024)  
 Bachelor's degree (1 major, 1 minor) Digital Humanities (2024)  
 Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)  
 Bachelor's degree (1 major) Human-Computer-Interaction (2024)  
 Bachelor's degree (1 major) Classics (2024)  
 Bachelor's degree (1 major, 1 minor) European Ethnology/Empiric Cultural Studies (2025)



Module title		Abbreviation
Programming and Algorithmic Thinking		04-DH-A4-242-m01
Module coordinator		Module offered by
holder of the Chair of Digital Humanities and German Literature of the Modern Period		Chair of Digital Humanities and German Literature of the Modern Period
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Introduction to the basic concepts of programming and algorithmic thinking (breaking down a task into sub-steps). Use of important programming tools, as well as existing libraries and their documentation.		
Intended learning outcomes		
Students should be able to solve simple programming problems independently and be able to use existing libraries for more complex problems.		
Courses (type, number of weekly contact hours, language — if other than German)		
S (2) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
a) presentation (20 to 30 minutes) with written elaboration (3 to 5 pages) or b) written examination (45 to 60 minutes) or c) oral examination (approx. 20 minutes) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: once a year, summer semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor's degree (2 majors) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)		

Module title		Abbreviation
Data Modelling and Text Encoding		04-DH-A5-242-m01
Module coordinator		Module offered by
holder of the Chair of Digital Humanities and German Literature of the Modern Period		Chair of Digital Humanities and German Literature of the Modern Period
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Overview of the basics of data modeling and overview of important models, e.g. relational databases, XML, and graphs. Basic methods of coding thematic and formal structures in texts using TEI as an example. Teaching. Practical skills in data modeling and in dealing with text coding.		
Intended learning outcomes		
Students are familiar with key terms and selected approaches to data modeling, e.g. relational databases and XML, and can use these on their own. Students are familiar with the TEI markup language and are able to apply it to texts.		
Courses (type, number of weekly contact hours, language — if other than German)		
S (2) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
written examination (approx. 60 minutes) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: once a year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor's degree (2 majors) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024) Bachelor's degree (1 major) Classics (2024)		

Module title		Abbreviation
Data Preparation and Annotation		04-DH-A6-242-m01
Module coordinator		Module offered by
holder of the Chair of Digital Humanities and German Literature of the Modern Period		Chair of Digital Humanities and German Literature of the Modern Period
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Collect and prepare data (e.g. deal with missing data, standardize data types) and annotate data (develop annotation schema, deal with annotation guidelines, annotate, compare annotations)		
Intended learning outcomes		
Carry out and present the steps from data collection to data processing and annotation in a principled manner.		
Courses (type, number of weekly contact hours, language — if other than German)		
S (2) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
written examination (approx. 60 minutes) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: once a year, summer semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor's degree (2 majors) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)		

Module title		Abbreviation
Introduction to Image Processing		10-I-EBV-242-m01
Module coordinator		Module offered by
holder of the Professorship for Computer Science (Computational Humanities)		Institute of Computer Science
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This lecture introduces digital image processing and analysis, covering the following topics: Basic properties of image data, image acquisition, signal processing (especially filters and transforms), image compression, main application areas (documents, photos, ...), typical tasks in image processing and analysis and algorithmic approaches, including selected machine learning methods		
Intended learning outcomes		
The students have a fundamental understanding of image data as well as theoretical and practical knowledge in image processing and specialized machine-learning methods. They have gained experience with typical analysis tasks and are able to understand, adapt and apply corresponding algorithms.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (2) + Ü (1) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
a) presentation (20 to 30 minutes) with written elaboration (3 to 5 pages) or b) written examination (approx. 60 minutes) or c) oral examination (approx. 20 minutes) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: once a year, summer semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor's degree (2 majors) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)		

Module title		Abbreviation
Research Design		04-DH-B2-242-m01
Module coordinator		Module offered by
holder of the Chair of Digital Humanities and German Literature of the Modern Period		Chair of Digital Humanities and German Literature of the Modern Period
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Overview of the individual steps of the research design from the formulation of hypotheses within the framework of a theory to the definition of terms and variables as well as operationalization to data collection and analysis.		
Intended learning outcomes		
Ability to develop a research plan for a given problem from the field of DH and to justify and carry out the individual steps.		
Courses (type, number of weekly contact hours, language — if other than German)		
S (2) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
approx. 5 exercises (15 to 20 hours total) and term paper (10 to 12 pages) Language of assessment: German and/or English		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: once a year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor's degree (2 majors) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)		

Module title		Abbreviation
Introduction to Advanced Mathematics 1		10-M-EHM-1-242-m01
Module coordinator		Module offered by
Dean of Studies Mathematik (Mathematics)		Institute of Mathematics
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
The lecture introduces students to higher mathematics and covers the following topics: Functions and their properties, limits and continuity of functions, differential calculus, systems of linear equations, vectors and matrices as well as functions with several variables including partial derivative and gradient		
Intended learning outcomes		
Students have a basic understanding of the listed topics in higher mathematics and are able to apply their theoretical knowledge and the methods they have learned to different contexts.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (2) + Ü (1) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
a) written examination (60 to 120 minutes) or b) oral examination of one candidate each or in groups of up to 2 candidates (15 to 30 minutes per candidate) or c) project work (e. g. written solutions and corresponding explanations, 10 to 15 pages total) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: once a year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)		

Module title		Abbreviation
Text Analysis		10-I-TA-242-m01
Module coordinator		Module offered by
holder of the Chair of Computer Science XII (Natural Language Processing)		Institute of Computer Science
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This lecture introduces methods for processing of and working with text data. Topically, the lecture will cover computational representations of text, text classification and clustering methods, approaches and models for syntactic analysis of text, algorithms for extracting information from text, methods for modeling text meaning (i.e., semantics), and approaches to evaluate the performance of text processing methods. The course will also introduce a number of machine learning models commonly used in text processing tasks.		
Intended learning outcomes		
The students have a fundamental understanding of processing text data as well as theoretical and practical knowledge in specialized machine-learning methods for text processing. They have gained experience with typical text analysis tasks and are able to understand, adapt and apply corresponding and algorithms.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (2) + Ü (1) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
a) presentation (20 to 30 minutes) with written elaboration (3 to 5 pages) or b) written examination (45 to 60 minutes) or c) oral examination (approx. 20 minutes) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: once a year, summer semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor's degree (2 majors) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)		

Module title		Abbreviation
Introduction to Data Science		10-I-IDS-242-m01
Module coordinator		Module offered by
holder of the Chair of Computer Science XII (Natural Language Processing)		Institute of Computer Science
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course introduces practically oriented lectures that introduce the core principles and methods of data science, including: data collection and preprocessing, descriptive analysis and visualization of data, predictive data analysis, working with special data types such as images, text, and graphs/networks, statistical testing of results obtained with methods working on data, and ethical aspect of data science (e.g., biases and fairness).		
Intended learning outcomes		
The students have a fundamental understanding of a practical data science pipeline and are able to successfully carry out meaningful real-world data science work, starting from (i) posing the research question that is to be answered with data-based evidence, over (ii) explorative analysis of the data and proposing the most suitable methodological approach for the task at hand, to (iii) analyzing the results, their statistical strength, and implications thereof.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (2) + Ü (1) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
a) presentation (20 to 30 minutes) with written elaboration (3 to 5 pages) or b) written examination (45 to 60 minutes) or c) oral examination (approx. 20 minutes) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: once a year, summer semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor's degree (2 majors) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)		



Module title		Abbreviation
Free Choice of Project in the Digital Field		04-DH-B3-242-m01
Module coordinator		Module offered by
holder of the Chair of Digital Humanities and German Literature of the Modern Period		Chair of Digital Humanities and German Literature of the Modern Period
ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
<b>Contents</b>		
Practical implementation of the knowledge acquired in the Digital Humanities degree program.		
<b>Intended learning outcomes</b>		
Students are able to work on a problem in the Digital Humanities, develop methods to solve it and implement the solution in appropriate work steps and present the results.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
R (o) Module taught in: German and/or English		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
wrap-up report (15 to 20 pages) Language of assessment: German and/or English		
<b>Allocation of places</b>		
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<b>Additional information</b>		
project external to JMU		
<b>Workload</b>		
300 h		
<b>Teaching cycle</b>		
Teaching cycle: once a year, winter semester		
<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Bachelor's degree (2 majors) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)		

## Compulsory Electives

(5 ECTS credits)

Module title		Abbreviation
Digital Editions and Corpora		04-DH-C1-242-m01
Module coordinator		Module offered by
holder of the Chair of Digital Humanities and German Literature of the Modern Period		Chair of Digital Humanities and German Literature of the Modern Period
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Introduction to the principles of creating and designing digital editions and corpora and their use in subject-specific research contexts.		
Intended learning outcomes		
Students can create digital editions and corpora and use them to answer subject-specific questions.		
Courses (type, number of weekly contact hours, language — if other than German)		
S (2) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
a) exercises (approx. 10 to 15 pages) or b) presentation (approx. 20 to 30 minutes) with written elaboration (approx. 3 to 5 pages) or c) written examination (approx. 45 to 60 minutes) or d) oral examination (approx. 20 minutes) or e) term paper (approx. 10 to 12 pages) or f) practical project (e. g. transcription, encoding and web publication of (approx. 3 to 5) letters) Language of assessment: German and/or English		
Allocation of places		
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Additional information		
--		
Workload		
150 h		
Teaching cycle		
Teaching cycle: every two years, if announced		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor's degree (2 majors) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)		

Module title		Abbreviation
Data Base		04-DH-C4-152-m01
Module coordinator		Module offered by
holder of the Chair of Digital Humanities and German Literature of the Modern Period		Chair of Digital Humanities and German Literature of the Modern Period
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Introduction to creating and editing databases as well as their use in the humanities.		
Intended learning outcomes		
Students are able to create databases and to use them to answer research questions from the humanities.		
Courses (type, number of weekly contact hours, language — if other than German)		
S (2) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
a) Exercises (approx. 10 to 15 pages) or b) presentation (approx. 20 to 30 minutes) with written elaboration (approx. 3 to 5 pages) or c) written examination (approx. 45 to 60 minutes) or d) oral examination (approx. 20 minutes) or e) term paper (approx. 10 to 12 pages) or f) practical project (e. g. transcription, encoding and web publication of (approx. 3 to 5) letters) Language of assessment: German and/or English		
Allocation of places		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2015) Bachelor's degree (2 majors) Digital Humanities (2015) Bachelor's degree (1 major, 1 minor) Digital Humanities (2016) Bachelor's degree (1 major, 1 minor) Digital Humanities (2018) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2018) Bachelor's degree (2 majors) Digital Humanities (2018) Bachelor's degree (2 majors) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)		

Module title		Abbreviation
Simulation		04-DH-C5-152-m01
Module coordinator		Module offered by
holder of the Chair of Digital Humanities and German Literature of the Modern Period		Chair of Digital Humanities and German Literature of the Modern Period
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
<b>Contents</b>		
Introduction to creating simulations as well as their use in the humanities and cultural studies.		
<b>Intended learning outcomes</b>		
Students are able to create simulations and to use them to answer research questions from the humanities.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
S (2) Module taught in: German and/or English		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
a) Exercises (approx. 10 to 15 pages) or b) presentation (approx. 20 to 30 minutes) with written elaboration (approx. 3 to 5 pages) or c) written examination (approx. 45 to 60 minutes) or d) oral examination (approx. 20 minutes) or e) term paper (approx. 10 to 12 pages) or f) practical project (e. g. transcription, encoding and web publication of (approx. 3 to 5) letters) Language of assessment: German and/or English		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
150 h		
<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2015) Bachelor's degree (2 majors) Digital Humanities (2015) Bachelor's degree (1 major, 1 minor) Digital Humanities (2016) Bachelor's degree (1 major, 1 minor) Digital Humanities (2018) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2018) Bachelor's degree (2 majors) Digital Humanities (2018) Bachelor's degree (2 majors) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)		

Module title		Abbreviation
Visualization		04-DH-C7-242-m01
Module coordinator		Module offered by
holder of the Chair of Digital Humanities and German Literature of the Modern Period		Chair of Digital Humanities and German Literature of the Modern Period
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Introduction to the principles of visualization and overview of reliable strategies for visualizing data types such as statistical data, distributions, text, graphs, etc.		
Intended learning outcomes		
Ability to justify the selection of a visualization strategy for given data and the practical skills to implement the chosen visualization strategy.		
Courses (type, number of weekly contact hours, language — if other than German)		
S (2) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
a) exercises (approx. 10 to 15 pages) or b) presentation (approx. 20 to 30 minutes) with written elaboration (approx. 3 to 5 pages) or c) written examination (approx. 45 to 60 minutes) or d) oral examination (approx. 20 minutes) or e) term paper (approx. 10 to 12 pages) or f) practical project (e. g. transcription, encoding and web publication of (approx. 3 to 5) letters) Language of assessment: German and/or English		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every two years, if announced		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor's degree (2 majors) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)		

Module title		Abbreviation
Introduction to Audio Processing		10-I-EAV-242-m01
Module coordinator		Module offered by
holder of the Professorship for Computer Science (Computational Humanities)		Institute of Computer Science
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This lecture introduces digital audio data processing and analysis, covering the following topics: Basic properties of audio data, audio signal processing (especially time-frequency transforms), selected machine-learning methods, main application areas (speech, music, environmental sounds), typical tasks (classification, detection, analysis) and algorithmic approaches		
Intended learning outcomes		
The students have a fundamental understanding of audio data as well as theoretical and practical knowledge in audio signal processing and specialized machine-learning methods. They have gained experience with typical analysis tasks and are able to understand, adapt and apply corresponding algorithms.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (2) + Ü (1) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
a) presentation (20 to 30 minutes) with written elaboration (3 to 5 pages) or b) written examination (45 to 60 minutes) or c) oral examination (approx. 20 minutes) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: once a year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor's degree (2 majors) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)		

Module title		Abbreviation
Introduction to Advanced Mathematics 2		10-M-EHM-2-242-m01
Module coordinator		Module offered by
Dean of Studies Mathematik (Mathematics)		Institute of Mathematics
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
The lecture deepens higher mathematics and covers the following topics: Extension of topics of higher mathematics to complex numbers, integral calculus, eigenvalues and eigenvectors as well as quadratic forms; differential calculus of several variables (especially applications as well as advanced topics); basics of probability theory		
Intended learning outcomes		
Students can build on their previous knowledge of higher mathematics and have an in-depth understanding of the listed topics in higher mathematics. They are able to apply their theoretical knowledge and the methods they have learned to different contexts.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (2) + Ü (1) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
a) written examination (60 to 120 minutes) or b) oral examination of one candidate each or in groups of up to 2 candidates (15 to 30 minutes per candidate) or c) project work (e. g. written solutions and corresponding explanations, 10 to 15 pages total) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: once a year, summer semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Module studies (Bachelor) Orientierungsstudien (2020) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)		



Module title			Abbreviation
Special Topics in Digital Humanities			o4-DH-C8-251-m01
Module coordinator		Module offered by	
holder of the Chair of Digital Humanities and German Literature of the Modern Period		Chair of Digital Humanities and German Literature of the Modern Period	
ECTS	Method of grading	Only after succ. compl. of module(s)	
5	numerical grade	--	
Duration	Module level	Other prerequisites	
1 semester	undergraduate	--	
Contents			
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Intended learning outcomes			
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Courses (type, number of weekly contact hours, language — if other than German)			
S (2) Module taught in: German and/or English			
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)			
a) exercises (approx. 10 to 15 pages) or b) presentation (approx. 20 to 30 minutes) with written elaboration (approx. 3 to 5 pages) or c) written examination (approx. 45 to 60 minutes) or d) oral examination (approx. 20 minutes) or e) term paper (approx. 10 to 12 pages) or f) practical project (e. g. transcription, encoding and web publication of (approx. 3 to 5) letters) Language of assessment: German and/or English			
Allocation of places			
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Additional information			
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Workload			
150 h			
Teaching cycle			
Teaching cycle: every two years, if announced			
Referred to in LPO I (examination regulations for teaching-degree programmes)			
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Module appears in			
Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2015) Bachelor's degree (2 majors) Digital Humanities (2015) Bachelor's degree (1 major, 1 minor) Digital Humanities (2016) Bachelor's degree (1 major, 1 minor) Digital Humanities (2018) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2018) Bachelor's degree (2 majors) Digital Humanities (2018) Bachelor's degree (2 majors) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (2024) Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2024)			