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Modules offered in the Master's programme
Interaction Research & Design
at the Otto-Friedrich-University Bamberg

Please note that all the information in this document corresponds to the current planning status as of 14 December 2023. This document is intended to allow prospective students to inform themselves about the planned study contents in advance. The details provided are not legally binding and are subject to change. The official regulations are currently still being processed.

In the master's programme in Interaction Research & Design, the total number of ECTS credits to be achieved, including the master's thesis, is 120 ECTS credits. The programme includes module groups A1 to A7. The ECTS credits required within the programme are distributed as follows across the module groups.

	Module group	ECTS
A1	Introduction to Interaction Research & Design	9
A2	Design	0-36
A3	Empiricism	0-36
A4	Computer Science	0-36
A5	Projects	30
A6	Seminars (two Master's seminars, each with a design, empirical or computer science focus)	6
A7	Master's thesis (subject areas according to Annex 2)	30
	Sum	**120**

The following modules worth 9 ECTS credits must be completed in **module group A1**.

ID	Module name	ECTS	Exame	rT
HCI-MCI-M	Human-Computer-Interaction	6	Written or oral exam	
HCI-Prop-M	Propaedeutic course Human-Computer Interaction	3	Term paper with presentation	

In **module group A2**, in the foundational area, 0–18 ECTS credits are to be obtained, and in the specialisation area, likewise 0–18 ECTS credits are required. All modules can be chosen by the students themselves. The specialisation modules can be selected according to the recommended prerequisites (even from one's own bachelor's degree and without having completed all the foundational modules from A2).

Module group A2 – foundational area: 0 – 18 ECTS-credits				
ID	Module name	ECTS	Exame	rT
VIS-IVVA-M	Advanced Information Visualization and Visual Analytics	6	Written exam	
HCI-DISTP-B	Design of Interactive Systems: Theory and Practice	6	Colloquium	
ISM-MDI-M	Managing Digital Innovation	6	Portfolio	
UxD-G-M	Fundamentals of Design	6	Written exam	
HCI-IDG-M	Fundamentals of Interaction Design	6	Colloquium	
Module group A2 – Specialisation area: 0 – 18 ECTS-Credits				
UxD-UIxD-M	Urban Interaction Design	6	Written exam	
HCI-DFM-M	Design and Research Methods in Human-Computer Interaction	6	Written or oral exam	
MII-MID-M	Multimodal Interaction Design	6	Written exam	

HCI-DR-M	Design Research	6	Colloquium	
HCI-ID-M	Interaction Design	6	Colloquium	
DdK-BPGU-B	Artistic Practice: Designed Environment	6	Presentation	
DdK-KBPA-B	Artistic and Visual Practice: Advanced	8	Portfolio	

In **module group A3**, in the foundational area, 0–18 ECTS credits are to be obtained, and in the specialisation area, likewise 0–18 ECTS credits are required. All modules can be chosen by the students themselves. The specialisation modules can be selected according to the recommended prerequisites (even from one's own Bachelor's degree and without having completed all the foundational modules from A3).

Module group A3 – Foundational area: 0 – 18 ECTS-Credits				
ID	Module name	ECTS	Exame	rT
EinfIRD	Introduction to Psychology, Its History, and Ethical Foundations for Applied Informatics and IRD (Interaction Research & Design)	6	Written or oral exam	
AllgPsy1IRD	General Psychology I for Applied Informatics and IRD (Interaction Research & Design)	6	Written or oral exam	
PersPsyIRD	Personality Psychology for Applied Informatics and IRD (Interaction Research & Design)	6	Written or oral exam	
BA Soz B.1.1	Introduction to the Methods of Empirical Social Research Part I	5	Written exam	
BA Soz B.1.2	Introduction to the Methods of Empirical Social Research Part II	5	Written exam	

BA Soz D.6.1 B	Fundamentals of Ergonomics	5	Written exam or term paper or portfolio or presentation with term paper or oral exam	

BA Soz D.5.1 F	Sociology of Media Communication: Introduction to Media Sociology	5	Written exam or term paper or portfolio or presentation with term paper or oral exam	
BA Soz A.2	Social structure in international comparison I and II	10	Written exam	
BA Soz D.6.1 A	Fundamentals of ergonomics	5	Written exam or term paper or portfolio or presentation with term paper or oral exam	
Module group A3 – Specialisation area: 0 – 18 ECTS-Credits				
AllgPsy2IRD	General Psychology II for Applied Informatics and IRD	6	Written or oral exam	
BioPsyIRD	Biological Psychology for Applied Informatics and IRD	6	Written or oral exam	
SozPsyIRD	Social Psychology for Applied Informatics and IRD	6	Written or oral exam	
AOPsyIRD	Occupational and Organizational Psychology for Applied Informatics and IRD	6	Written or oral exam	
MASOZ-ST2	Sociological theory	6	Portfolio or Presentation with term paper or oral exam	
MASOZ-ST1	Sociological theory and research	6	Portfolio or Presentation with term paper or oral exam	
MASOZ-MES1	Research Design	6	Written exam	

ID	Module name	ECTS	Exame	rT
MASOZ-KMI1	Communication, Media and Public Relations	12	Portfolio or Presentation with term paper or oral exam	
MASOZ-POA1	Staff and work	12	Portfolio or Presentation with term paper or oral exam	

In **Module group A4**, 0-18 ECTS credits must be earned in the foundational area and 0-18 ECTS credits in the specialisation area. All modules can be chosen by the students themselves. The specialisation modules can be chosen according to the recommended prior knowledge (also from your own Bachelor's degree and without having completed all the basic modules from A4).

Module group A4 – Foundational area: 0 – 18 ECTS-Credits				
ID	**Module name**	**ECTS**	**Exame**	**rT**
DSG-EiAPS-B	Introduction to Algorithms, programming and software	6	Written exam	
MI-EMI-B	Introduction to media informatics	6	Written exam	
KInf-IPKult-E	Computer science and Programming for the cultural studies	9	Term paper and written exam	
KogSys-KogMod-M	Cognitive modeling	6	Oral exam	
SWT-FSE-B	Foundations of Software Engineering	6	Written exam	
DSG-JaP-B	Java programming	3	Written exam	
Module group A4 – Specialisation area: 0 – 18 ECTS-Credits				
IIS-ASE-M	Agile Software Engineering	6	Written exam	
CG-CGuA-B	Computer graphics and animation	6	Written exam	
DS-IDS-M	Introduction to dialog systems	6	Oral exam	

AI-KI-B	Introduction to artificial intelligence	6	Written exam	
KogSys-ML-B	Introduction to Machine Learning	6	Written exam	
xAI-MML-M	Mathematics for Machine Learning	6	Written exam	
SME-Phy-B	Physical Computing	6	Written term paper	
MI-WebT-B	Web technologies	6	Written exam	
DSG-AJP-B	Advanced Java Programming	3	Term paper with Colloquium	

Two modules, each with 15 ECTS credits, must be completed in **module group A5**. All project modules must be in Applied Informatics. Each project module must relate to at least two of the topics of design, empiricism and computer science.

In **module group A6**, two seminar modules from Applied Informatics, each worth 3 ECTS credits, must be completed. The module exam in each seminar is achieved through a presentation with a written term paper.

In the **module group A7**, the master's thesis module is worth 30 ECTS credits. The topic of the master's thesis must relate to at least two of the topics of design, empiricism, and computer science. The module examination is completed in the form of a written assignment with a completion time of six months and a colloquium. The topic of the master's thesis can be taken from one of the following subjects: Subjects in the Applied Computer Science subject group: Explainable Machine Learning, Information Visualization, AI System Development, Cognitive Systems, Cultural Informatics, Media Informatics, Human-Computer Interaction, Smart Environments; as well as other subjects from the Interaction Research & Design Master's degree course.