

RheinMain University of Applied Sciences – Faculty of Design Computer Sciences Media

Courses taught in English and bilingually or with limited English support*

* Please check the column "Language of Instruction"

Regarding your course selection, please note the following:

With your application at RheinMain University of Applied Sciences you enroll in a specific degree program. <u>Your selection of courses is therefore limited to courses offered within this program</u>. As a general rule, choosing courses from different programs is not possible, as courses from different programs frequently overlap.

To learn more about the course offerings for your semester at RheinMain University of Applied Sciences, please take a look at the list of courses taught in English/bilingually/with English support below or contact the respective <u>departmental international coordinator</u> for your degree program.

Please be informed that this course list may be subject to change.

According to your level of German you may also choose courses taught entirely in German. Please visit the faculty website to see the course offerings for the program of study you are enrolled in: https://www.hs-rm.de/en/faculties/.

Core Skill and Language Courses								
Core Skill Courses Open to All Exchange Students offered by the Competence & Career Center (Website)								
Course Title	Credit Points (= ECTS)	Semester Offered						
International Week: Future Leaders (one week, July/August 2025, dates tba)	3 ECTS	In Summer Only, block course						
Global competences: your study abroad portfolio	3 ECTS	Every semester						
Language Courses Open to All Exchange Students (Examples; for current course offer vi	sit the <u>Language Center Webs</u> i	te)						
German as a Foreign Language								
German Intensive Course (various levels*; 2 weeks, prior to start of semester)	4 ECTS	Every Semester						
* Our intensive course is primarily aimed at beginners to existing A-levels. Students with a level B1 and up in								



German <i>may</i> be asked to choose a semester-long course if they are interested in taking German language class, depending on the overall results of the placement tests prior to the Intensive	а	
Course.		
German as a Foreign Language (various A2-B2 levels)	2 ECTS	Every Semester
Hallo Deutschland: Geschichte, Kultur, Politik & Wirtschaft (German B2/C1)	2 ECTS	Every Semester
English as a Foreign Language	·	
1261 Essential English 1 (A2/B1)	2 ECTS	Every Semester
1313 English at Work: Writing Business Letters and E-Mails (B1)	2 ECTS	In Summer Only
1315 English at Work: Giving Presentations (B1)	2 ECTS	In Winter Only
1202 Instructory Volum English Assurages (P1/P2)	2 5070	Every Semester (sometimes compact
1292 Improve Your English Accuracy (B1/B2)	2 ECTS	in the semester break)
1155 Intercultural Communication in Practice (Blended Learning)	2 ECTS	In Winter Only
1115 Advanced Technical English 1 (B2)	2 ECTS	In Summer Only
1125 Advanced Technical English 2 (B2)	2 ECTS	In Winter Only
Additional English and German intensive courses and workshops are offered during the se	mester breaks – contact	the Language Center for information
"English for Specific Purposes" Courses (focus varies depending on degree program)		
Media English (B2/C1) (Media Management)	3 ECTS	Every Semester
Media English (B2/C1) (Media: Conception & Production)	3 ECTS	Every Semester
MCP-SPZ-01 English for the Creative Industries	3 ECTS	Every Semester,
		Online, 6-days block course
English for Design (B2)	3 ECTS	Every Semester
English for Interior Design (B2)	2 ECTS	Every Semester



Course Title	Course Code	Course Description	Credit Points (= ECTS)	Language of Instruction	Module offered
Communication Design (I	B.A.)				
Design Project	N.N.	15 different Design Projects available, for details please contact Christine.Bernhardt@hs-rm.de	9	Taught in German, 1:1-tutoring in English possible	Every Semester
Art & Design Technique	N.N.	20 different Art & Design Techniques available, for details please contact Christine.Bernhardt@hs-rm.de	3	Taught in German, 1:1-tutoring in English possible	Every Semester
Intercultural Communication	N.N.	Intercultural competence, interculturality, multiculturality and hybridity Self-perception and perception of others Reflection on personal cultural norms, values and attitudes Analysis of patterns of thinking, behaviour and communication in other cultures Critical evaluation of theoretical models of cultural differences Strategies for overcoming problems in intercultural communication Intercultural competence in a professional context	3	Taught in English	Every Semester
Computer Science (B.Sc.)/ Computer Engin	eering (B.Sc.)	1		
Bachelor's Thesis	71100	Analysis of the task Developing the theoretical basis, evaluating various alternative solutions Independent development of the solution to the problem Scientific documentation in the form of a Bachelor thesis	15	Supervision in English possible on enquiry before application	Every Semester
Elective Project	NN	Different Elective Projects available	5 or 10	Supervision in English possible on enquiry before application	Every Semester



Cyber Security	83150	Assess the threat situation and its impact on	5	Taught in German	In Summer Only
		an organization, explain technical and		with support in	
		procedural countermeasures required to		English.	
		defend against attacks, evaluate security		Slides are in English	
		concepts at architecture and process level,			
		select different protection mechanisms			
		depending on the context, methodically and			
		systematically evaluate procedures for			
		security incidents and discuss problems and			
		tasks in a small group and present solutions			
Introduction to Cloud	81770	Upon completion of this module, students will	10	individual team	Irregular, please inquire
Computing		know the basic structure of a computing		projects with	before applying
		cloud, have learned the necessary		supervision in English	
		fundamentals (virtualization, web services)		on demand, lectures	Prof. Dr. Philipp Schaible
		and have an overview of the common		in German with	
		technologies. They will know the difference		English explanations	
		between the architectural models: SaaS,		on demand	
		PaaS, IaaS, FaaS, CaaS, IaC, etc. and be able			
		to evaluate and apply them in the			
		development and deployment of web			
		applications.			
Automotive Security	83101	Explain the structure and functionality of	5	Taught in German	Irregular, please inquire
		current automotive architectures and		with support in	before applying
		technologies, explain the typical software		English.	
		architecture and implementation in an		Slides are in English	Prof. Dr. Marc Stöttinger
		automotive control unit, explain typical			
		automotive communication protocols, basic			
		functions and the implementation of typical			
		vehicle internal and external functions and			
		services, differentiate between different			
		security requirements and discuss existing			
		automotive security solutions, recognize and			
		explain security vulnerabilities in automotive			
		architectures and develop a solution proposal			
		for the vulnerability, list the currently most			



		common security concepts and standards in the automotive sector			
User Interface Design (UID)	81300	Practical semester project based on design thinking method. Student teams develop a user centered interface designs for an interactive application through different project phases from analysis to interactive klick-dummy prototypes including simple usability tests of the developed prototypes	5	individual team projects with supervision in English on demand, lectures in German with English explanations on demand	Irregular, please inquire before applying Prof. Sebastian Pedersen
User Experience Design (UXD)	81870	Practical large semester project with crossmedia and experimental focus. (e.g. media guides, installations, edutainment or elearning applications, web-apps, scrollytelling, software applications, community portals). Optional Interdisciplinary mixed teams in cooperation with other degree programmes and (international) universities. Teams go through a user experience design project process in phases from discover, define, design to deliver. Prototypical visualisation of the project and, if necessary, further media, click dummy, video documentation, organisation and design of assets (e.g. graphics, images, text, sound), alternatively prototypical technical implementation of key features.	10	individual team projects with supervision in English on demand, lectures in German with English explanations on demand	Irregular, please inquire before applying Prof. Sebastian Pedersen
Web Applications		 Server-side technologies: e.g. scripting languages, template technology, WebAssembly Client-side technologies: e.g. JavaScript, TypeScript, AJAX/REST, DOM Responsive, hybrid and single page applications Requirements engineering for web applications Modeling of web applications 	6	Taught in German with limited English support	In Summer Only



Information and Communication Technologies for Smart Cities	NN	 Architecture of web applications Testing of web applications Quality aspects (usability, performance, security) Web project management Open Urban Platforms, Reference Models for Smart Cities, Relevant Standards, Internet of Things for Smart Cities, Mobile Communication (2G/3G/4G/5G/6G), Local and Wide Area Networks in Smart Cities, Open 	5/10	Taught in German or if requested also in English.	Irregular, please inquire before applying Prof. DrIng. Nikolay Tcholtchev
		Data, Data Platforms			
Application of AI	NN	see Curriculum	10	Taught in German with support in English. Slides are in English	In Winter Only
Edge KI	NN	see Curriculum	5	Taught in German with support in English. Slides are in English	In Winter Only
SW-based Digitale Bildverarbeitung Architectures	NN	see Curriculum	5	Taught in German with support in English. German slides	In Winter Only
Computer Vision	81540	Image formation, camera imaging geometry, feature detection and matching, stereo, motion estimation and tracking, image classification, scene understanding, and deep learning with neural networks.	6	Taught in German with English support	Irregular, please inquire before applying Prof. Dr. Schwanecke
Computer Graphic	41010	Graphics representations and transformations, the viewing pipeline, visibility, lighting, and	6	Taught in German with English support	In Summer Only



Visual Computing 81901F	textures, as well as more advanced areas such as ray tracing and global illumination. Acquisition, analysis and synthesis of visual data using computer resources. Combination of multimedia and text	6	Taught in German with English support	Irregular, please inquire before applying
3D Modelling and Animation 7101	This course offers a deep dive into the techniques, tools, and technologies used in the creation of 3D models and animations, emphasizing both theoretical understanding and practical application. Students will explore a range of topics, including: - Acquisition of 3D object and scene models using advanced methods such as video-based 3D reconstruction, 3D scanning, and photogrammetry. - Techniques for terrain generation and reverse engineering to create realistic and functional 3D environments. - Examination of various object representations, including NURBS, point clouds, volumetric, and hybrid representations, to suit diverse modeling needs. - Mastery of industry-standard software such as Maya and 3D Studio Max for professional-grade 3D modeling and animation. - Animation techniques including keyframe animation, physics-based animation, motion capturing, and particle systems for dynamic and lifelike movements. By the end of the course, students will be able to create, animate, and manipulate 3D assets and environments using cutting-edge	5	Taught in German or if requested also in English. Lecture notes and slides are written in English	Prof. Dr. Schwanecke Irregular, please inquire before applying Prof. DrIng. Martin Weier



		necessary to analyze and implement workflows in animation and modeling pipelines, preparing them for careers in games, film, virtual reality, and more.			
Information Visualization	91020	This course provides a comprehensive foundation in information visualization, equipping students with the knowledge and skills to transform data into meaningful visual representations. Students will: - Apply foundational terminology and understand the visualization pipeline. - Explore the basics of information visualization, including the human visual system, perceptual psychology principles (e.g., pre-attentive perception, Gestalt laws), and visual variables such as color, texture, and shape. - Learn to classify and apply core visualization techniques for various data types and tasks. - Tackle individual and multidisciplinary visualization challenges, developing solutions that bridge technical and creative disciplines. - Undertake self-directed, research-oriented, and application-driven projects to design, implement, and evaluate visualizations, including interactive systems integrated into software solutions. - Communicate insights and project outcomes effectively, explaining solutions and their rationale to both technical experts and nonspecialist audiences. - Reflect on and apply visualization methods for personal analytical and communicative purposes. By the end of this course, students will possess the theoretical understanding and	5	Taught in German or if requested also in English.	Irregular, please inquire before applying Prof. DrIng. Martin Weier



		practical expertise necessary to design and			
		execute impactful visualizations for academic,			
		professional, and interdisciplinary contexts.			
Computer Games	7551	This course provides a comprehensive	5	Taught in German or	Irregular, please inquire
		introduction to the principles and practices of		if requested also in	before applying
		game development, equipping students with		English.	
		the skills and knowledge needed to design and			Prof. DrIng. Martin Weig
		build computer games. Through a combination			
		of theoretical exploration and practical			
		application, students will:			
		- Explore the fundamentals of game design,			
		including game AI and the principles that			
		underpin engaging gameplay.			
		- Understand and implement the design and			
		development processes critical to creating			
		compelling computer games.			
		- Learn, apply, and evaluate strategies to			
		optimize computing time in computer graphics			
		software, ensuring efficient performance.			
		- Gain hands-on experience selecting and			
		working with game engines to bring creative			
		concepts to life.			
		- Plan, develop, and critically evaluate a			
		computer game, managing projects			
		independently from concept to deployment.			
		- Collaborate effectively as a team member in			
		a multidisciplinary game development			
		environment, taking on tasks such as tool			
		creation and user interface development.			
		- Develop skills to communicate clearly with			
		team members and clients across technical			
		and creative disciplines.			
		By the end of the course, students will have			
		the technical expertise and collaborative			
		experience needed to contribute meaningfully			
		to the field of game development.			



Computer Science (M.Sc.)					
Master's Thesis	94310	Analysis of the task, development and use of formal models, evaluation of possible alternatives Methodologically sound design of complex systems Development of complex software using current technologies Proof of functional and non-functional properties Scientific documentation in the form of the Master's thesis	30	Supervision in English possible on enquiry before application	Every Semester
Project - Design and Realization of Systems I & II	91310/ 92310	Project management (especially time and resource management) of a manageable research project in a group (other group members are usually fellow students, but can also be, e.g., academic scientific assistants). Thorough literature research on the topic of the Master's project Presentation of the research results to the group in the form of a state-of-the-art report as the basis for the finding solutions Independent development of solution approaches for the task through discussion in a group, weighing up of alternative solutions Realisation/implementation (in the sense of a proof-of-concept) using current technologies and tools Evaluation of the solution found according to relevant criteria Securing the results in the form of documentation in accordance with the rules of good scientific practice.	12	Taught in German or English	Every Semester



Advanced Methods in Scientific Research	90110	After successful completion of the module, students will be able to, - independently conduct scientific research projects. - create scientific texts appropriate to the target group. - prepare and communicate scientific and practice-relevant issues for lectures and presentations. - apply and communicate practical knowledge for use in scientific,	6	taught in English, support in English (upon request)	In Winter Only
		commercial, and other contexts analyze and critically reflect on scientific texts present their own thoughts and arguments in a structured and comprehensible manner in their own scientific Presentations. use efficient research methods in a target-oriented way.			
Advance Security Engineering	92020	Assess the security of an implementation of security measures in hardware or software, apply the technical and procedural countermeasures required to defend against potential attacks, understand and plan modern and current security concepts at architecture and process level andselect different protection mechanisms according to context	6	in German or English (upon request)	In Summer Only
Advance Digital IC Design	92010	Independently design, evaluate and optimise digital circuits for practical applications (CPUs, bus systems or communication interfaces), explain circuits at PDK level, carry out the complete design process for an ASIC/FPGA independently using common	6	in German or English (upon request)	Winter



		development tools and explain automated development processes for production			
Model-driven Engineering and Low Code Platforms	92041S	Models and Metamodels, Static and Dynamic Semantics, Domain-specific Languages Code Generation, Model Transformation, Model- Driven Processes	6	in German or English (upon request). Lecture notes and slides are in English	Irregular, please inquire before applying Prof. Dr. Hinkel
Machine Learning	91040	After successful completion of the module, students will be able to, - name and classify the most common machine learning methods and their properties and parameters. - explain how common ML methods work and evaluate their general properties. - select suitable models to solve dedicated questions. In particular, students can transfer ML methods to various central application areas of machine learning (e.g. image understanding, natural language processing). - apply the selected models according to an appropriate process model, i.e. implement them in practical Software. - evaluate and critically assess the solutions developed. adapt learning methods to the respective problem if necessary (e.g. using suitable feature extraction, preprocessing or finetuning).	6	Lecture in English, practical course in German/English, exam can be offered in English	Every Semester
Programming Language Foundations	92051S	The objective of the course is to learn fundamental techniques to reason about programs and their semantics. Contents of the course include the Turing machine, the	6	in German or, if requested, in English. Lecture notes and slides are in English	Irregular, please inquire before applying Prof. Dr. Sabel



Information Visualization Digital Government		lambda calculus, evaluation strategies, Hindley-Milner type inference, termination, verification of functional algorithms, denotational and operational semantics.	5	Taught in German or if requested also in English. Taught in German or	In Winter Only In Summer Only
Digital Government			O	if requested also in English.	in Summer Only
SW-based Architectures	93050	After successful completion of the module, students will be able to: - understand the global relationships between requirements, architecture, modeling techniques and the necessary procedures for developing a situationally appropriate architecture design. - apply general design principles and architectural patterns that influence architectures. - apply methods and techniques for making architectural decisions and modeling SW architectures. - evaluate architecture-related topics holistically and provide usage recommendations. apply the above-mentioned competencies with competencies in the context of a practical project.	6	Taught in German with support in English. English slides. Can be taught in English upon request.	In Summer Only
Parallel and distributed algorithms	99310	- Machine models for parallel and distributed processing (esp. multicore/multiprocessor systems, clusters, grids, distributed architectures based on	6	Taught in German with limited English support	Irregular, please inquire before applying Prof. Dr. Martin Gergeleit



		communication networks, GPGPUs, etc.) - Programming paradigms for parallel and distributed processing - Abstractions for synchronisation and communication and their programming interfaces in different programming languages Patterns			
		 Parallel algorithms for special application areas Implementation environments (e.g. Message Passing Interface (MPI), OpenMP, MapReduce/Hadoop, OpenCL) Fundamentals of distributed algorithms Basic distributed algorithms (e.g. election algorithms, distributed scheduling, snapshot, global time, commitment, auctions) Special distributed algorithms for specific 			
The Internet of Things	98310	applications Internet of Things: - Basic definitions and delimitations - Hardware basics, especially RFID technologies and node architecture - Networks for the Internet of Things, esp. low-power radio technologies - Integration with the classic internet, 6LoWPAN - Middleware for the Internet of Things - Self-localisation and tracking - IdD and Big Data - Security and privacy - Business aspects of the Internet of Things	6	Taught in German with limited English support	Irregular, please inquire before applying Prof. Dr. Martin Gergeleit



		Application areas: esp. Industry 4.0, logistics, smart home, medical technology Experiments with various IdD nodes (Raspberry Pi, sensor nodes) and IdD wireless technologies (RFID, NFC, IEEE 802.15.4, Bluetooth Smart) Design and implementation of an IdD device			
Cloud Computing	NN	On completion of the module, students will be able to understand, evaluate and use modern cloud-based architectures both technically and conceptually. The main topics are: - Scalable architectures and algorithms (e.g. microservices, NoSQL, caching, streaming, MapReduce) - Use of container services and respective automation (Kubernetes, etc.). - Non-functional aspects of individual services (e.g. scaling, cost and security) and their impact on the characteristics of the resulting cloud application.	6	Can be taught in German or English (upon request)	Irregular, please inquire before applying Prof. Dr. Philipp Schaible
Applied Visual Computing		On successful completion of the module, students will be able to: - formulate and evaluate application potential in the field of visual computing, such as autonomous driving, entertainment computing, medical imaging, information visualisation / visual analytics - Compare implementation methods specific to visual computing	6	Taught in German with support in English. English slides. Can be taught in English upon request.	Irregular, please inquire before applying Prof. Dr. Ulrich Schwaneke



		applications and apply them to			
		concrete application problems and analyse use cases.			
		Develop interactive application systems using self-selected and new combinations of current methods and technologies, especially in the field of AI and visual computing, and gain experimental scientific knowledge.			
Digital Government	93031	Basic models, methods and concepts of digital government - Digitalization strategies and initiatives in the public sector - IT architectures (in particular open source architectures) - Interoperability and standardization - IT management Trends and effects of digitalization (EU, federal, state and local authorities)	6	Taught in German or if requested also in English.	In Summer Only
Information Visualization			5	Taught in German or if requested also in English.	In Winter Only
Interior Architecture (B.A.)					
Design and Cultural History 2	1246	 Overview of essential building and design ideas from architecture, design, interior design and art from the beginning industrialization to the present Exploration of general civilizational, ethical and cultural values and their change in the above-mentioned time period 	3	Taught in English	Fall term history 2 (19 th and 20the century), Summer term history 1 (from antique times till the industrial revolution)
Concepts / Compact	1321	- Conceptual quick designs to develop functional, appealing and structural ideas for essential design tasks	4	Taught in German; support in English	Intense, introductory Warm-Up Course at the beginning of the semester. Mandatory for all students.



Module Project Space:	1330	- General knowledge of architectural	15	Taught in German;	The Design project is the
		design		support in English	core of the Interior Design
Consisting of:	Consisting of:	- Empathy in the use of materials as well			Studies. Weekly homework
 Construction 	1331	as the application of knowledge of			and attendance.
 Design 	1332	craftsmanship or industrial construction			
 Representation 	1333	and manufacturing techniques			
		- Knowledge of appropriate rules and			
		standards for planning, design,			
		construction, health, safety, and			
		the use of the built environment			
		Non-subject specific skills			
		(communication and cooperation).			
		- Intuition and empathy regarding diverse			
		needs and cultures of client or end users			
		- Creative experience in designing as an			
		interaction of perception, knowledge,			
		intuition, practice and imagination			
		- Ability to transfer to unfamiliar contexts			
		- Ability to develop and present own artistic			
		ideas			
		- Originality in the development of ideas,			
		concepts and details			
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International Media Management (B.Sc.)

The seven courses below are available to incoming students in the International Media Management program and are designed to appeal to internationally oriented students who want to learn how international cooperation works in the conception, production, and marketing of media. All "Case Studies" and "Current Topics" courses are taught by international experts who come to Wiesbaden from all over the world, and the lectures cover topics such as media management, international business, marketing, media design, media technology and media economics. Because these courses are designed to address current challenges and topics in the media industry, which are be selected by the international lecturers for each semester, the course descriptions must remain vague and can only provide examples of course content.

In addition to the seven courses offered in the International Media Management program, you can also take the intensive German course offered prior to the semester (two weeks, staring mid-March/mid-September, 4 ECTS; please refer to page 2 of this document ["German Intensive Course"] for important details on the levels offered). If you would like to take this course, please add "German Intensive Course" with 4 ECTS credits to your Learning Agreement. Further information about the course will then be offered in due time by the International Office.



Important note: Due to the block structure of the International Media Management courses offered, it will NOT be possible to attend a language course (German and/or other) during the semester for students of IMM.

Case Study in International Media Management 1	M15.1	Content examples: • Strategies for the entry of companies and brands in different regional markets • Success factors for the internationalization of companies,	6	Taught in English by International Guest Lecturers	Every Semester
Case Study in International Media Management 2	M15.2	products and media productions Competition and environment analysis of different regional markets Media usage behavior in international comparison Corporate design in an international context Intercultural corporate communication Management of international companies Corporate management with multinational employees Methods for the assessment of opportunities and risks of internationalization of brands and companies Recruitment and management of international employees	6	Taught in English by International Guest Lecturers	Every Semester
Current Topics in Media Management: Design	M16.1	Students deepen their interdisciplinary skills in discourse with experts from abroad and identify current issues relevant to international media markets and productions.	3	Taught in English by International Guest Lecturers	Every Semester



Current Topics in Media Management: Economics	M16.2	interdisciplinary connections and references to the fields of design, business, and technology. They are able to argue their own contributions to the discussion and take on the	3	Taught in English by International Guest Lecturers	Every Semester
Current Topics in Media Management: Technology	M16.3		3	Taught in English by International Guest Lecturers	Every Semester
Research Studies	M14	Students acquire knowledge of scientific methods and principles and apply them to a given research question. Specifically, they will analyze a current issue in the field of International Media Management with a focus on the influence of media formats and technologies on media use and reception.	6	Taught in English	Every Semester
Project Methods and Management	M17	Students acquire practical skills in project management (e.g., defining project goals, planning and organizing creative processes, self-reflection, documenting project results). As part of the course, students will create a project exposé.	3	Taught in English	Every Semester
Media and Design Manage	ment (M.Sc.)				
Digital Business & Transformation	2002	Causes of digital transformation Key technologies and drivers of digital transformation Value creation structures and players in the digital business economy Effects of digital transformation on business processes and structures Selected case studies and enabling technologies in digital business	3	Taught in English	In summer only



		Introduction into mobile business (as a selected area of digital business) Basic principles of the development of mobile solutions and mobile business models			
Digital Markets: Economics & Regulation	2002	Selected contents. Due to the dynamics of the topic the contents are regularly updated at the beginning of the course. As a result, the following selection is to be understood as an exemplary "snapshot": Digital Telecom/Media Markets: Relevance and Development Regulatory Frameworks in Digital Markets (Example: Telecommunications / Media Markets) Structures of and value chains on digital telecommunications networks Business models for the distribution of media content on telecommunications networks Convergence of media content and telecommunications services	3	Taught in English	In summer only
Branding	2202	Foundation of Brand Management Design in the context of marketing and branding Organising design teams and decision making in design Strategies and methods of analysing and positioning brands Naming and testing of brand identities Corporate identity and corporate design Trademark protection and legal issues of brands	3	Taught in English	In summer only
Marketing & Communication Management	2202	Marketing Planning Operational Marketing Corporate and Marketing Communication	3	Taught in English	In summer only
Motion Image Media - Production & Technology	2402	Media Technologies:	3	Taught in English	In summer only



		 Fundamental audio/video technologies and future trends Merging audio/video and information/communication technologies in production, postproduction and distribution Management systems (portals, CMS, EAI, collaboration systems, web shops, automation, playout) Organizational processes and technical workflows in network production environments Motion image productions 			
Motion Image Media - Storytelling & Design	2402	Methods and techniques of storytelling (classical basic elements, cross media storytelling, transmedia storytelling, serial storytelling, possibly also interactive storytelling and storytelling in VR and AR) Basic elements and emergent innovations in visual and auditory dramaturgies On the basis of selected current topics: Derivation of a usage scenario and suitable distribution channels for it Development of a transmedial Storyworld* by applying storytelling methods and visual dramaturgies in the development of usage and distribution specific moving image formats (* or interactive storytelling, VR, AR and future systems with moving image parts)	3	Taught in English	In summer only
Smart System Design & Technology	2502	Lectures convey interdisciplinary aspects, such as technical frameworks and design methods, for the design of smart interactive media. These will be geared towards state-of-the-art applications. Further, this knowledge will be applied in concrete conception exercises, addressing an initially defined user experience. In addition, variously scaled	3	Taught in English	In summer only



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		implementation possibilities will be assessed,			
		as well as their chances, risks and required			
		effort.			
		- Possibilities and limitations of current			
		technologies in the field of Augmented			
		Reality and Virtual Reality			
		- Interactive Surface Computing			
		- Interactive Entertainment, Game Design			
		aspects and Interactive Storytelling			
		- Computer supported collaborative work			
User Experience Design	2502	The course 'User Experience Design' conveys	3	Taught in English	In summer only
		basic knowledge of user experience on two		· · · · · · · · · · · · · · · · · · ·	
		levels, both theoretical and practical. Students			
		gain an insight into the know-how for			
		integrating users into the design, development			
		and testing of user interfaces. Further,			
		different techniques for prototyping, testing			
		and evaluating will be demonstrated and			
		applied in			
		practical exercises.			
		- Usability Engineering / Usability Testing			
		- Persona, Use Case, Scenario			
		- Heuristic Evaluation			
		- Measuring UX quality aspects with			
		questionnaires			
		- Accessibility			
Ctudent Decemb (Dusiest)	2102		6	Cunamidan in	la cura na cur a milu
Student Research (Project)	2102	Students will extend their knowledge of	O	Supervision in	In summer only
		research methods and research processes, as		English possible on	
		well as of collecting and analyzing data. They		enquiry before	
		will be put into a position to utilise this during		application	
		their studies by assessing and accomplishing			
		research tasks, preparing a seminar paper as			
		a trial for their Master thesis. They shall be			
		able to document their results in written form			
		following the standards of academic research			
		and writing.			



Media Computer Science	B.Sc.)				
Bachelor's Thesis	9050	Analysis of the task - Developing the theoretical basis, evaluating various alternative solutions - Independent development of the solution to the problem - Documentation in the form of the Bachelor thesis	15	Supervision in English possible on enquiry before application	Every Semester
Software Engineering Project	5110	Independent processing of a larger software project in a team Role allocation in the team Agile project implementation Appropriate documentation of project results Work organisation in the team Methodical project support Software project management, agile approaches to project organisation Time management, models and techniques; conflict management; Dealing with personal resources Metrics and effort estimation Configuration and change management (versioning, configuration; tool support), software	10	Taught in German, 1:1 tutoring in English possible, if the working group decides to work in English	In winter only
Media: Conception and Pro	oduction (B.A.)				
Design & Photography (mandatory for exchange students)	M0-14-LV-01	 Basics of design, typeface and typography, photography and image editing, sign language, logo design and corporate design. Design projects in individual or group work Creation of an expose to present an idea, content and implementation represented by design tools such as mood board, storyboard, camera work, montage/editing, etc. 	6	Taught in English	Every Semester



		Creation of a personal design portfolio/ reflection book by the students during the semester			
Videography (mandatory for exchange students)	M0-14-LV-02	 Basics of image composition, creative use of camera tools such as aperture, exposure time, focal length, depth of field, light. Historical outline of the creative development of photography Basics of camera work and montage Basics of storytelling, creating a storyboard Basics of auditory design Practical exercises: Individual or group work on the topics of photography, cinematography and lighting. 	6	Taught in English	Every Semester
Media Technology & Applications (mandatory for exchange students)	M0-14-LV-03	 Physical and technical basics of media technology Basics of image generation Basic concepts of acoustics Hardware of audio and video technology Tutorials on Adobe Creative Cloud 	6	Taught in English	Every Semester
Project Management (mandatory for exchange students)	MO-12-LV-01	 Practice-proven project management structures and processes Agile project management & Design Thinking Project planning and controlling Risk management Conflict management: methods for recognizing conflicts in good time and resolving them systematically Feedback culture Methods, tools, and success factors of project communication 	3	Taught in English	Every Semester



		 Sustainability in film production and project planning: measuring and monitoring energy and resource consumption as well as CO2 emissions to identify potential for improvement Continuous review and evaluation of own planning to measure progress on gender equity and diversity and drive further improvements 			
Design Workflow (optional)	MCP-04-08	 Use of channels and means of communication customary in the industry Target-group-oriented preparation of content Platform-specific forms of presentation for ideas and stories Using information sources and communicating content Workflows and success factors in design management Project life cycle: creating cross-media communication concepts Documenting workflows and work outcomes 	3	Taught in English	Summer 2025
Media Production Basics (optional)	MCP-04-09	 Introduction to media production from a business management perspective Script analysis and extracts Resource planning Timetables and production schedules, work coordination Basic principles of costing 	3	Taught in English	Summer 2025
Media English (optional)	MCP-07-15	 Subject-specific video material in English Topic-related discussions in English (e.g. on trends in the media sector) Subject-related presentations in English 	3	English	Summer 2025
Intercultural Communication	MCP-13-25	Reflection on personal cultural norms, values and attitudes	3	English	Every Semester



(optional)		 Intercultural barriers Analysis of the patterns of thought, behaviour and communication of other cultures Critical evaluation of theoretical models relating to cultural differences Dealing with foreignness and intercultural conflicts Targeted training in English-language presentation techniques Topic-specific discussions in English 			
Strategic Conception (optional)	MCP-05-01	 Systematics of strategy-based media conception and production Systematics of mass communication Target group definitions and analyses target group-oriented preparation of content Platform-specific forms of presentation of ideas and stories Success factors and quality features of Short Form Content Project life cycle: creating cross-media communication concepts Creative briefing Exposé and Pitch Integration of environmental aspects awareness for sustainability Create a safe and inclusive work environment 	3	English	Every Semester
Production Management (optional)	MCP-05-02	 Roles and tasks in moving image production Phases of moving image production Production planning and preparation Shooting and post-production Environmental-friendliness of productions Diversity and inclusiveness in productions 	3	English	Every Semester



Media Management (B.Sc	c.)				
Topics of Media Economics	B-MM-L45-SWI	Independent scientific work on an individual topic in the field of Media Economics. The result is a written document according to standards for scientific papers. Different topics available, for details please contact before applying	6	Individual work on scientific paper with supervision in English	Every Semester
Intercultural Communication	B-MM-L16- CUL	Intercultural competence and communication (theories, analysis, reflection, problemsolving) presentations writing assignments selection and work on a specific theme in the context of intercultural communication with lectures, presentations and discussions	3	English	Every Semester
Social and Professional Skills	B-MM-L15- SBK	Independent work on a practical oriented topic in the field of public relations, event management, research and documentation, etc. Different topics available, for details please contact us before applying	3	Individual Project with supervision in English	Every Semester
Project	B-MM-L38-PR1	Group project on current topics of Media Management. Different topics available, for details please contact us before applying	14	English or German with group tutoring in English (depending on project)	Every Semester