RheinMain University of Applied Sciences – Faculty of Architecture and Civil Engineering

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. At the Faculty of Architecture and Civil Engineering, you are allowed to choose courses from all degree programs offered. A selection of courses from other faculties is not possible.

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 International Coordinator of the Faculty of Architecture and Civil Engineering (international-fab@hs-rm.de). 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 curricula for all degree programs: https://www.hs-rm.de/en/faculties/architecture-and-civil-engineering/international#international-students-72757.

Core Skill and Language Courses		
Course Title	**Credit Points (= ECTS)**	**Semester Offered**
Core Skill Courses Open to All Exchange Students offered by the Competence & Career Center (Website)		
International Week: Future Leaders 18.-22.07.2022	3 ECTS	In Summer Only, as a block class
Language Courses Open to All Exchange Students (*Examples*; for current course offer visit the Language Center Website)		
German as a Foreign Language		
German Intensive Course (various levels*; duration: 2 weeks, prior to start of exchange semester) * Our intensive course is primarily aimed at existing A- to B1-levels. Students with a level B2 and up in German *may* be asked to choose a semester-long course if they are interested in taking a German language class, depending on the overall results of the placement tests prior to the Intensive Course.	4 ECTS	Every Semester

German as a Foreign Language (various A2-B2 levels)	2 ECTS	Every Semester
Hallo Deutschland: Geschichte, Kultur, Politik & Wirtschaft (German B2)	2 ECTS	Every Semester

English as a Foreign Language		
1261 Remedial English 1 (A2/B1)	2 ECTS for exchange students	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
1292 Improve Your English Accuracy (B1/B2)	2 ECTS	Every Semester (but sometimes compact 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 also offered during the semester breaks – contact the Language Center for information		
"English for Specific Purposes" Courses (focus varies depending on degree program)		
English for Civil Engineering (B1/B2)	3 ECTS	Every Semester
English for Real Estate Management 1	5 ECTS	In Summer Only
English for Real Estate Management 2	5 ECTS	In Winter Only
English for Heritage Conservation	2 ECTS	Every Semester
English for Mobility Management	2 ECTS	In Winter Only

Course Title	Course Code	Course Description	Credit Points (= ECTS)	Language of Instruction	Course offered
Architecture (B.Sc.)					
Design Studio B: Building and Type	BAR210	Project B deals with current topics and tasks in the context of the built city and always aims to design a concrete house at a precisely determinable location and with a precise and realistic spatial program. In the process, the following aspects, among others, are investigated and dealt with in design terms: - The significance of references, types and models for one's own design. - The connection between the context and the shape of the house. - The interior organisation of the house. - The interplay between the interior structure and the expression of the house. - The differentiation between public and private spaces in the house. - The shape and appropriateness of the façade in relation to its task and significance in the context. - The variety of architectural elements and their functions as well as their significance for the character of the house. - The relationship between the organisation of the floor plan and the function and shape of the house.	9	Taught in German, 1:1-tutoring in English possible	Every Semester
Design Studio C: The City and the Urban Realm	BAR310	The aim of the course is to acquire the ability to think, design and develop beyond the mere individual object (architecture) in a complex context (city). The development of a concept that	10	Taught in German, 1:1-tutoring in English possible	Every Semester

		provides answers to questions posed and self-developed, but inherent to the location and its spatial-social context, is at the centre of the task. Through the interlocking of content in the module, the methodical application of the processes of urban design, constructive implementation and structural-technical derivation is practised holistically. The prospective architects acquire the competence to work interdisciplinarily across several scales			
Design Studio E: Building and Program Integration: Interior Design / Building Envelope	BAR603 BAR605	On the basis of a design task with a demanding space allocation plan and complex interior design and structural interrelationships, the students show that they are able to transfer the acquired knowledge into a coherent and differentiated design. The main focus of the task is on the development of a design focusing on a complex space allocation plan and the necessary structural, spatial, and material realization. Project-related and specific contents on the main topics of interior design and building envelope	8 2	Taught in German, 1:1-tutoring in English possible	Every Semester, last time offered in WS 22/23
Design Studio W1: Construction and Technology	BAR410	By means of a design task, the students must prove that they can develop independent solutions for demanding and complex design tasks in terms of building construction and that they have the ability to implement both the structure, the supporting structure and the building envelope in the form of an integrated overall concept. The project W1 defines its focus in the area of design-forming constructions without programmatic specification. The focus of	10	Taught in German, 1:1-tutoring in English possible	Every Semester, first time offered in SS 22, two different projects available

		the task is the development of a design with a focus on the structural, spatial-constructive and material implementation. The constructive focus of the design is on timber construction.			
Design Studio W2: Construction and Technology	BAR610	On the basis of a design task with a demanding spatial program and complex interior and structural interrelationships, the students must demonstrate that they are able to transfer the acquired knowledge into a coherent and differentiated design. Special emphasis is placed on the aspects of routing and room structuring as well as the development of structural, material and colour concepts that determine both the atmosphere of the rooms and the appearance of the building envelope in a congruent continuation of the design idea.	10	Taught in German, 1:1-tutoring in English possible	Every Semester, first time offered in SS 23, two different projects available
AdHocs	1700	The individual tasks are thematically independent and didactically different small design projects. The type of processing and presentation depends on the respective task. Each semester four AdHocs are offered. Each Adhoc is worth 1,5 ECTS, so in the scope of one semester up to 6 ECTS can be collected.	1,5 - 6	Task is given in German with English support, the work on the mini-projects is done by the students themselves	Every Semester 4 different AdHocs
Computational Design	BAR360	Commonalities and differences between classical and digital design. Parametric design versus direct modeling, geometry, and parametric rules Aesthetic aspects of parametric design and digital optimization. Learning to use typical software for this purpose.	4	Taught in German and English simultaneously	Every Semester
Electives		Different Electives available, a list is published shortly before the semester starts, please contact international-fab@hs-rm.de	2-4, depends on Elective	Taught in German, English support must be enquired at the beginning of the	Every Semester

				semester, very few taught in English	
Bachelor's Thesis	9050	The bachelor's thesis is the examination paper that concludes the bachelor's degree. It shows that the candidate is able to deal with a problem from his or her subject area independently according to scientific methods within a given period of time. Solution of a project task in the fields of urban planning, building construction or a written concept in the field of construction management	22	Supervision in English possible on enquiry before application	Every Semester

Architecture (M.Sc.)					
Design Project Heritage	MA-012	Project development - in the economic and use-specific area Development and inclusion of basic material (drawings, plans, data) Analysis - region - location - building: inclusion of building research, damage mapping, building substance analysis, compilation and evaluation of data and statistics Determination of use: Justification and evidence for use based on secondary statistics, the preceding analyses and observations, among other things. Design concept Economic feasibility: methods of proof for calculating return on investment Writing a feasibility study in the form of a scientific, written paper with corresponding design drawings	14	Taught in German, 1:1-tutoring in English possible	Two semesters in a row, one semester break, beginning in SS 22
Scientific Minor Heritage	MA-014	The focus of the course is: - an intensive examination of a building, an urban area, a city or region - Documentation by means of measurement and room book in order to clarify construction processes and the development of the building - Theoretical reconstruction of building phases - Literature research and knowledge of comparative examples in order to work out a classification of the object in the building-historical context	4	Taught in German, 1:1-tutoring in English possible	Together with Design Project Heritage

		- Determining a "valuation", cultural-historical classification or a classification in the urban context - Drafting of texts and preparation of building descriptions The object-specific application of modern measuring and documentation techniques is of particular importance in the exercise.			
Design Project Add-On	MA-022	The uses of buildings are changing in ever faster cycles - barracks are becoming city quarters, office buildings are becoming housing, and industrial buildings are often becoming obsolete. The still very entrenched belief that buildings are programmed for long periods of time must be questioned. Thus, building today is always rebuilding or continuing to build. The aim is to acquire the ability to think and design beyond the mere individual object (architecture) in the complex context (process). The development of a strategy to build on the existing and to provide answers to questions posed and developed by the students themselves, but inherent in the existing structure, is at the centre of the task.	14	Taught in German, 1:1-tutoring in English possible	Two semesters in a row, one semester break, beginning in WS 21/22
Scientific Minor Add-On	MA-024	Integrated into the Design Project Add-On, strategic competences in the field of further building beyond the singular design project are to be practised.	4	Taught in German, 1:1-tutoring in English possible	Together with Design Project Add-On

Design Project Transformation	MA-032	An existing building is designed in the sense of a given architectural task. A transformation strategy is developed by analysing the existing building and assessing its potential, and an architectural project is developed, presented and discussed. The conceptual focus is placed on a sustainable consideration of the building as an ecological and economic resource and its spatial and structural transformation in a social context.	14	Taught in German, 1:1-tutoring in English possible	Two semesters in a row, one semester break, beginning in WS 21/22
Scientific Minor Transformation	MA-034	Based on a qualitative as well as quantitative analysis of the existing building structure of different example projects, different architectural potentials are elaborated and discussed comparatively, taking into account programmatic, ecological and social goals.	4	Taught in German, 1:1-tutoring in English possible	Together with Design Project Transformation
Master's Thesis	9050	The master's thesis can deal with the following topics: • Project work: architectural work: usually an architectural design • Written and scientific work: usually a research project mainly from the fields of preservation, adding, transformation or paste	30	Supervision in English possible on enquiry before application	Every Semester
Architectural Heritage Conservation (B.Sc.)					
The History of Urbanization	BBK236	Introduction: overview of the history of urban planning and construction and its significance for current urban development responsibilities Ancient history and protohistory: topographic location, public and cultic buildings, residential units, fortifications Antiquity: topographic location, public and cultic buildings, residential units, fortifications	2	Taught in English	Every Semester

		Middle Ages: city founding, idealized townscapes, quarters, streets, squares Renaissance / Baroque: ideal, planned and fortress cities Industrialization: urban processes of growth and change 20th century: guiding principles of urban planning and resulting spatial structures Presence: history of urbanism and current responsibilities in urban development			
Special Fields of History of Architecture II	BBK336	Different topic areas dealt with in the lecture on building history (16th – 20th century) are addressed in more detail. Research/examinations, presentations, and papers on individual regions, construction types, and/or epochs Topics are partially linked to the content of the History of Art Seminar Putting into historical and biographical context	2	Taught in English	Every Semester
Cultural Heritage in an International Context	BBK413	Introduction: history and handling of built cultural heritage in Germany and in the context of the UNESCO World Heritage Convention Introduction to the notions of Outstanding Universal Value, authenticity and integrity Central questions to the notions of interculturality and transculturality in the World Heritage program Management of UNESCO World Heritage sites – tasks and conflicts	4	Taught in English	Every Semester
Strategies in Built Heritage Conservation	BBK414	Depiction of the conservation of built heritage with respect to their specific historical functions, constructions and building structures by means of case studies	2	Taught in English	Every Semester

		Different fields of conservation such as Building Conservation, Urban Conservation and Garden Conservation Definitions and concepts of the prevalent methods of preservation such as building survey and building documentation, conservation, restoration, renovation, maintenance, repair and re-habilitation as well as reconstruction. Presentation of several action strategies against the back-ground of historic and recent conservation theories Communication with potential project partners, historic monuments protection authorities and state offices for historic monuments also in regard to organization and methods of operation			
Heritage Impact Assessment for World Heritage Properties	8042	Increasing demands of urban development and revitalisation in recent decades has been damaging both tangible and intangible heritage values. In such a situation, conflict raise between management plans and development projects. In 2011, ICOMOS international developed a Heritage Impact Assessment (HIA) guideline regarding identify and assess the negative impacts of man-made threats on heritage values, and consequently, minimize and mitigate the adverse impacts as well as improve the management and protection of World Heritage properties. This seminar is going to introduce how this assessment tool works, through the study of several World Heritage properties which HIA is conducted in recent years. Besides, the students will be familiar with other assessment instruments such as SEA and EIA.	2-4	Taught in English	Every Semester

Bachelor's Thesis	9050	The bachelor's thesis is the examination paper that concludes the bachelor's degree. Each semester there is a task which is formulated by the students themselves. The topic is taken from the subject areas of the bachelor's degree program. The work is super-vised on a random basis, appointments for enquiries are available.	15	Supervision in English possible on enquiry before application	Every Semester
Civil Engineering (B.Eng.)					
Bachelor's Thesis	9050	Acquired competences: - Structuring of a defined topic - Scientifically based and methodically derived problem solving - In-depth thinking through and familiarisation with a professionally sound topic - Systematisation of a set topic - Creative thinking - Problem orientation and reasoned problem solving - Researching the necessary specialist literature - Ability to analyse and synthesise - Critical questioning of facts, methods and backgrounds - Research skills	10	Supervision in English possible on enquiry before application	Every Semester
Geotechnical Laboratory	11142	Independent performance of investigations in the field: small borehole, dynamic penetration testing (DPH, DPL), density determination, plate load test, etc. Independent preparation and performance of laboratory tests: Determination of consistency limits, grading curves by sieving and sedimentation, Proctor test, compression test, shear test and determination of water	2	Taught in German, with 1:1 tutoring in English	Every Semester

		permeability. Preparation of a geotechnical investigation report according to Eurocode 7.2			
Laboratory in Sanitary Environmental Engineering	23130	Presentation of the analytical methods according to the German Standard Methods (DEV). Carrying out practical laboratory tests in the Laboratory for Urban Water Management (determination methods for relevant wastewater parameters, oxygen determination, pH determination, precipitation and flocculation tests, determination of the dewatering behaviour of sewage sludge, etc.).	2	Taught in German, with 1:1 tutoring in English	Offered on an irregular basis, please enquire before application: international-fab@hs-rm.de
Planning Project in Sanitary Environmental Engineering	23130	Requirements for technical systems (operating environment, load assumptions, maintenance, service life) Components and performance spectrum of the plants Basics of dimensioning (design, construction, operation, material, location) Dimensioning and application of specialised software; creation of automation concepts; planning methods and monitoring instruments Aspects of interdisciplinary cooperation with participating specialist engineers	3	Taught in German, with 1:1 tutoring in English	Offered on an irregular basis, please enquire before application: international-fab@hs-rm.de
Project Costing and Prizing	22030	Based on the example of a selected building project, development of a complete tender preparation and offer calculation taking into account expenditure and demand values of various service areas, calculation procedures in the EDP application, here surcharge calculations with variable surcharges, apportionment calculation, original calculation, final sheet, EFB forms, changes in apportionments, variant calculation.	5	Taught in German, with 1:1 tutoring in English	In Winter only, beginning WS 22/23

Civil Engineering & Construction Management (M.Eng.)					
Technical Risk Management	40140	The course is composed of the theoretical and practical aspects of project management and project risk management in civil engineering projects. The theoretical part gives overview of traditional and agile project management approach in project risk management. The planning, assessment and treatment stages are discussed with emphasis of processes, tools and techniques. All aforementioned is applied and tested on real case study of project Miramare during workshop.	6	Taught in English	Every Semester; limited number of participants, 1-2 incomings
Decision-making for Managers in Civil Engineering	N.N.	The course is composed of the theoretical and practical aspects of project management in civil engineering projects. The theoretical part gives overview of basic principles, methods and techniques as well as conditions for multi-criteria decision-making in order to achieve the sustainable project solution. The decision-making process throughout the projects' whole life-cycle is discussed with the emphasis on processes, tools, and techniques that are used in both single and group decision-making environment. All aforementioned is applied on the case study with the goal of solving specific problems that occur in civil engineering projects.	6	Taught in English	In summer only; limited number of participants, 1-2 incomings, beginning Summer Semester 22
Digitalization in Civil Engineering - Basic Tools for Working with BIM and Lean Management	N.N.	The course is composed of the theoretical and practical aspects of gathering digital information from physical site (construction and/or maintenance phase) and updating the designed n-dimensional BIM twin to as-built thus creating true Digital Twin. The basic benefits of digital twin technology can be summed up in efficiency,	6	Taught in English	In summer only; limited number of participants, 1-2 incomings, beginning Summer Semester 22

		flexibility and accessibility. Therefore, the theoretical part gives overview of basic principles, methods and techniques of digitalization and automation in construction for asset lifecycle management purposes. The aforementioned is applied on the case study with the goal of creating certain "digital copy" of a construction asset (in construction phase or during usage/maintenance).			
Master's Thesis	49210	- Scientifically sound work - Structuring of a defined topic - Scientifically based and methodically derived problem solving - Thinking through and familiarising oneself with a subject in depth - Systematisation of a given topic - Creative thinking - Problem orientation and scientifically based problem solving - Researching the necessary specialist literature - Ability to analyse and synthesise - Critical questioning of facts, methods and backgrounds - Research skills	30	Supervision in English possible on enquiry before application	Every Semester
Environmental Management and Urban Planning in Metropolitan Areas (M.Eng.)					
Interdisciplinary Project	8100	Multifunctional and complex analysis of interdisciplinary goals and tasks, differentiation of concerns, functions and tasks, derivation of the different technical goals and subtasks, synthesis of common tasks and concerns, elaboration of environmental concerns and environmental quality goals, consideration of aesthetic aspects, recognising the different user demands, dealing	10	Supervision in English possible on enquiry before application	Every Semester

		with a concrete planning case in the Rhine-Main conurbation. Review of tasks through all planning stages, cooperation with institutions and project with institutions and project sponsors, planning and environmental law on the project case, landscape and open space planning as well as environmental assessment and LBP/impact regulation; responsibilities and decision-making, Objective setting and assessment criteria, planning process, procedure management, participation, project management participation, project assessment, research, realisation, economic framework conditions, social components, Moderation tasks / mediation, modularisation, environmental management, controlling, evaluation, property law, Public law and private law in the project case. Usually with case studies on environmental assessment			
Master's Thesis	9050	Scientifically sound work Structuring a defined topic Scientifically justified and methodically derived problem solution Thinking through and familiarising oneself with a professionally sound topic Systematising a set topic Creative thinking Problem orientation and scientifically justified problem solution Researching the necessary specialist literature Ability to analyse and synthesise Critical questioning of facts, methods and backgrounds, Ability to research	30	Supervision in English possible on enquiry before application	Every Semester

Mobility Management (B.Eng.)					
Bachelor's Thesis	9050	Technical consolidation of a study module or combination of several study modules at the end of the study program in order to lead into professional practice. Focus on engineering, technical or business aspects with the business part accounting for maximum one third of the bachelor's thesis. Work on the bachelor's thesis for six weeks.	15	Supervision in English possible on enquiry before application	Every Semester
Real Estate Management (B. Eng.)					
International Real Estate Development	4830	Investment decisions of European investors in Germany Investment decisions of German investors in Europe Differentiating economic, tax and legal framework conditions for investing abroad Different market situations based on selected examples from other European countries and their metropoles, e.g. London, Madrid and Paris Particularities of Eastern European countries and their investment structures	5	Taught in English	Only summer semester
International Real Estate Economics	4920	Micro- and macro-economic basis of the case studies Regional economic analysis and urban economics Economic theory and practice of interest rate and currency management in open economies Hedging strategies Structures of international finance and currency politics (for-eign trade policy) Economic theory of games, behavioral finance and application to negotiation models in real estate economics	5	Taught in English	Only summer semester

		Application-oriented case studies on international real estate economics Depending on group size: practice lectures and/or excursions to companies/institutions (corporate contacts) Compiling			
Bachelor's Thesis	9050	Technical consolidation of a study module or combination of several study modules at the end of the study program in order to lead into professional practice Link to the practical experience phase module in the same semester Possibility to combine the two modules in such a way that the topic of the bachelor's thesis can be developed and determined by the activities and tasks done during the practical experience phase in co-ordination with the company providing the practical experience placement Focus on engineering, technical or business aspects with the business part accounting for maximum one third of the bachelor's the-sis Work on the bachelor's thesis for eight weeks, followed by an oral examination and a presentation of the major aspects of the bachelor's thesis	12	Supervision in English possible on enquiry before application	Every Semester