

# Course Schedule



in accordance with the *Prüfungsordnung und Studienordnung* (Examination Regulations and Study Regulations (hereinafter Examination and Study Regulations)) for the master's degree course  
Architecture.  
from 20.11.2015

## **Preface**

The master's degree course Architecture at the Faculty of Architecture and Design is significantly different to the bachelor's degree course Architecture in terms of content, structure, composition and degree of freedom. The students can select their areas of specialisation in a self-determined degree course. A mentor, who must be assigned to the students, will advise them and help them to refine their personal profile. A substantial integrated project is the central piece of every semester's work, in which the creative design process is accompanied by an academic investigation of the chosen topic. Academic and practical architectural methods are linked to one another to intensify the derivation of theoretical knowledge and examine its practical viability.

The contents of the master's degree course Architecture are shaped by three profiles.

### **Architectural Design Research**

'Architectural Design Research' refers to academic methods of design research that combine empirical, hermeneutic and creative approaches. This combination emphasises the importance of the design process. Research and designing interact with one another. Design processes are seen as individual pieces of research and research attempts are understood as elementary components of the design process. The approach implies that a design and an intended measure are not only examined with regard to their practical viability, but in particular, the effects that they will have on the surrounding environment are investigated and placed in their specific social context.

The focal point of this profile is the linking of teaching, practice and research in architecture. Students learn from a process-oriented and practical approach by working on projects and they investigate problems of conceptual design.

The students learn the latest design methods and strategies for the practical side of working as an architect and the realisation of architectural visions. They gain knowledge concerning the interrelated effect of contemporary architectural, artistic, technological and planning developments. Students develop a creative understanding of problems and are enabled to suitably tackle substantial architectural and design tasks and to come up with appealing solutions that are based on academic principles.

The main topics are:

- Urban design
- Experimental design
- Digital design methods
- Architectural and artistic concepts

### **Green Architecture**

'Green Architecture' enables students to gain and consolidate their knowledge of the interdependency of technologies in the field of energy and resource-efficient construction. It covers the treatment of the development of energy concepts, the examination of the life-cycle approach for buildings and the knowledge about the selection of environmentally-friendly building materials. Students will learn about the required verifications, as well as the basics for certifications. With this offer, we are providing an answer to the current challenges facing the design of sustainable architecture and its surroundings, whilst taking climate change into consideration.

The main topics are:

- Green building
- Energy-efficiency
- Sustainable international management

### **Architecture in Context**

'Architecture in Context' consolidates the critical approach to historical architecture and includes, in particular, knowledge about architectural history and the preservation of monuments in all decision-making processes. The consideration of the term monument, the evaluation and ranking of monuments and the systematic architectural surveying of historical buildings are at the centre of attention. Selected monuments are used for teaching the fundamentals of surveying and building archaeology, the design focuses on strategies for preservation and sustainable maintenance. The course will look at existing projects with extensions and expansions, as well as new construction projects closely related to existing buildings. Topics will also be covered that are related to World Cultural Heritage.

The main topics are:

- Building work on existing buildings
- Architectural history
- Building surveys
- Preservation of monuments
- Advanced look at cultural heritage

## **Compulsory Modules**

Person responsible for  
the module

### **Design**

CM 01	Design Project 1	Prof. M. Ludwig
CM 02	Design Project 2	Prof. M. Wollensak
CM 03	Design Project 3	Prof. Dr. B. Niemann
CM 04	Sketch Designs	Prof. J. A. Joedicke

### **Dissertation**

CM 05	Dissertation Seminar	First Examiner
CM 06	Dissertation + Colloquium	First and Second Examiner

## **Compulsory Elective Modules**

CEM I	Town Development and Landscape Architecture	Prof. Dr. B. Niemann
CEM II	Urban Development Theory and Urban Development History	Prof. Dr. B. Niemann
CEM III	Design Methods and Architectural Theory	Prof. J. A. Joedicke
CEM IV	Planning and Construction of Existing Buildings	Prof. A. Gaube
CEM V	Architecture und Environment	Prof. M. Wollensak
CEM VI	Construction and Technology	Prof. S. Flaßnöcker
CEM VII	Construction Economics, Construction Law and Management	Prof. Dr. M. Hackel
CEM VIII	Architectural Visualisation and Presentation	Prof. M. Ludwig
CEM IX	Artistic Design	Prof. J. Krüger
CEM X	General Science and the Humanities	Prof. A. Gaube

## Module Contents

Module	<b>CM 01 Design Project 1</b>
Topic	Building design with experimental focus
Contents	<p>The first design project in the master's degree in architecture mainly focuses on the investigation of a conceptual approach to architectural topics. The design project generally looks at design and architectural aspects, but focuses on the architectural contents and the assignment. The design project should be worked on extensively and presented according to the concept. Analytical, conceptual and visual skills will be developed and reference will be made to current social discourse. This project consolidates both the development of an individual architectural language and the critical skills of the students.</p> <p>The Architecture Department challenges students to try out topics that aren't just limited to the urban, design and technical construction range. Students will be encouraged in particular to produce theoretical and experimental work that has a similar scope to a design project. The Architecture Department allows for a wide range of possible topics, which corresponds to the actual profession.</p> <p>The students can choose a topic themselves if they can find a member of teaching staff from the Department as a supervisor and have described the topic in a such a way that makes it possible to be studied.</p> <p>The module will be assigned to one of the three profile lines depending on the chosen topic.</p> <p>An advanced seminar accompanies the design assignment, during which the creative design process is enhanced by an academic examination of the topic.</p>
Qualification Objective	<p>The students have developed creative competence and expanded the spectrum of design methods by incorporating current social topics.</p> <p>They have learned to systematise the concept development and to implement the varying interdisciplinary design aspects in a design. They have also learned to develop individual architectural answers and gained knowledge of the broad span of architecture that stretches into neighbouring disciplines.</p> <p>The results are not simply represented using contemporary presentation techniques, the reflection of theory and the way the results were achieved are also important.</p>
Types of Teaching and	Project seminar and seminar

Prerequisites for participation	None
Can be selected for	Compulsory module for students studying for the master's degree in Architecture, teaching offer for students studying the master's degree in Architectural Lighting Design and Interior Design.
Duration	1 semester with 10 SWS, of which 8 SWS project seminar 2 SWS seminar
Frequency of offer	Winter and summer semester
Workload	<u>Contact hours:</u> 2 SWS (2x16 weeks): 32 h 8 SWS (8x16 weeks): 128 h  <u>Self-study:</u> Assignment: 370 h including interim presentations Preparation for examinations: 10 h incl. final presentation  total approx. 540 h
Credit points	18 CR (project work 15 CR, advanced seminar 3 CR)
Kind and scope of coursework	<u>Assessment components:</u> successful participation in the seminar, oral presentation 2 interim presentations  <u>Marked coursework:</u> Project work (PW), Presentation 45 min.
Number of possible participants	The member of staff providing the design project defines the number of participants. The students select a topic from several design topics on offer.

Module	<b>CM 02 Design Project 2</b>
Topic	Building design with technical and ecological focus
Contents	<p>The second design project in the master's degree course Architecture focuses in particular on the analysis of aspects relating to structure, structural engineering and building practice and the challenges of energy-saving and resource-efficient architecture.</p> <p>Adding to the understanding of the subject's contents that was gained during the bachelor's degree, the existing knowledge is consolidated by specialist knowledge in the areas of environmental and technological sciences, construction economics and construction management, as well as new and unfamiliar contexts.</p> <p>The design assignment focuses on the integration of technical, ecological and economic obligations in architectural and design concepts, which should be suitably described, visualised and presented as part of a project.</p> <p>This should foster the application of knowledge regarding the professional, commercial, financial and legal requirements.</p> <p>The module will be assigned to one of the three profiles depending on the chosen topic.</p> <p>An advanced seminar accompanies the design assignment, during which the creative design process is enhanced by an academic examination of the topic.</p>
Qualification Objective	<p>Application of knowledge and evidence of problem-solving competence in new and unfamiliar contexts. Integration of all aspects of a building design and consideration of its complexity, also with regard to the social and ethical effects.</p> <p>Ability to convey and present clearly understandable theories and constructive design solutions independently in front of experts and laypersons.</p> <p>Understanding of evaluation systems that use manual and/or electronic means to diagnose the built-up environment.</p>
Types of Teaching and Learning	Project seminar and seminar
Prerequisites for participation	None
Can be selected for	Compulsory module for students studying for the master's degree in Architecture, teaching offer for students studying the master's degree in Architectural Lighting Design and Interior Design.

Duration	1 semester with 10 SWS, of which 8 SWS project seminar 2 SWS seminar
Frequency of offer	Winter and summer semester
Workload	<p><u>Contact hours:</u> 2 SWS (2x16 weeks): 32 h 8 SWS (8x16 weeks): 128 h</p> <p><u>Self-study:</u> Assignment: 370 h incl. interim presentations Preparation for examinations: 10 h incl. final presentation</p> <p>total approx. 540 h</p>
Credit points	18 CR (project work 15 CR, advanced seminar 3 CR)
Kind and scope of coursework	<p><u>Assessment components:</u> successful participation in the seminar, oral presentation 2 interim presentations</p> <p><u>Marked coursework:</u> Project work PW, Presentation 30 min.</p>
Number of possible participants	The member of staff teaching the design project defines the number of participants. The students select a topic from several design topics on offer.



Module	<b>CM 03 Design Project 3</b>
Topic	Building design with urban development focus
Contents	<p>The third design project in the master's degree course Architecture focuses in particular on the area that investigates aspects of urban development, urban or regional planning. The design project should be a detailed and suitably visualised and presented piece of work that either looks at the creative and architectural aspects with a focus on the field of urban development or be a design that purely looks at the functions of urban planning or the design of urban development. The module shall refine analytical and conceptual skills and improve spatial thinking.</p> <p>The Architecture Department urges students who are suited to other fields, to try out new topics that do not belong to the traditional architectural design and technical construction range. Students will be encouraged in particular to produce theoretical and experimental work that has a similar scope to a design project. The Architecture Department allows for a wide range of possible topics, which corresponds to the actual profession. The students can choose a topic themselves if they can find a member of teaching staff from the Department as a supervisor with whom they have described the topic in a such a way that makes it possible to be studied.</p> <p>The module will be assigned to one of the three profiles according to the chosen topic.</p> <p>An advanced seminar accompanies the design assignment, during which the creative design process is enhanced by an academic examination of the topic.</p>
Qualification Objective	<p>The students have developed their creative competence and consolidated and tested the range of design methods. They have learned to systemise the development of concepts and to put interdisciplinary design arguments into practice in the design and planning according to selected principles of sustainable architectural and/or urban developments, if possible using planning criteria that have been tested, self-created and/or developed with their supervisor. They have gained team skills by creating designs in group work, with examinable elements of group work.</p> <p>They have learned that it is necessary to attain the greatest possible coherence between the design idea, the question of creative expression and the suitability of used materials. It is not only the result and the visualisation of the spatial concept in plans and models that are important, but also the reflection of the theory and the way the result was achieved.</p>

Types of Teaching and Learning	Project seminar and seminar
Prerequisites for participation	None
Can be selected for	Compulsory module for students studying for the master's degree in Architecture, teaching offer for students studying the master's degree in Architectural Lighting Design and Interior Design.
Duration	1 semester with 10 SWS, of which 8 SWS project seminar 2 SWS seminar
Frequency of offer	Winter and summer semester
Workload	<u>Contact hours:</u> 2 SWS (2x16 weeks): 32 h 8 SWS (8x16 weeks): 128 h  <u>Self-study:</u> Assignment: 370 h incl. interim presentations Preparation for examinations: 10 h incl. final presentation  total approx. 540 h
Credit points	18 CR (project work 15 CR, advanced seminar 3 CR)
Kind and scope of coursework	<u>Assessment components:</u> successful participation in the seminar, oral presentation 2 interim presentations  <u>Marked coursework:</u> Project work (PW), Presentation 45 min.
Number of possible participants	The member of staff teaching the design project defines the number of participants. The students select a topic from several design topics on offer.

Module	<b>CM 04 Sketch Designs</b>
Topic	<p>Sketch designs</p> <p>Minor design tasks that take somewhere between a few days and up to one week to complete and that are worked on independently with no corrections</p>
Contents	<p>Sketch designs are short design tasks with a reduced amount of subject matter and a restricted level of scope. Their purpose is to allow students to gain creative experience, to hone their skills for finding fast solutions to problems, to visualise their results convincingly and present them in a structured manner.</p> <p>A sketch design therefore only allows for a short handling time. No longer than a week should usually lie between the allocation of the topic and submission. Students have to successfully complete 6 of these sketch designs. It is suggested that students spread them equally over the three semesters.</p> <p>The word ‘sketch’ is used to represent the limited amount of time for completing the task and indicates a targeted, design or didactic aspect. As no corrections are made for sketch designs, the teaching emphasis is placed on a comparative analysis during an exemplary discussion of the works, which must be attended by all of the participants.</p>
Qualification Objective	<p><u>Learning objective:</u> The students are able to produce creative and conceptual solutions rapidly and to present them appropriately.</p> <p><u>Competencies:</u> Creativity</p>
Types of Teaching and Learning	Project seminar
Prerequisites for participation	None
Can be selected for	<p>Compulsory module for students studying the master’s degree in Architecture.</p> <p>It is also suitable for other degree courses (e.g. Interior Design, Architectural Lighting Design).</p>
Duration	<p>1 semester with 1 SWS (P)</p> <p>It is recommended that the sketch designs should be spread equally over the first three semesters.</p> <p>Double sketch designs can be provided.</p>
Frequency of offer	Winter and summer semester

Workload

Contact hours:  
1 SWS (1 x 16 Weeks): 16 h

Contact hours per sketch design: 30 min

Self-study:  
Preparations and follow-up work: none  
Assignment: 27 h  
Preparation for examinations: no  
examination (presentation): 2 h 30 min

per sketch design: 30 h

Total (6 sketch designs x 30 h): 180 h

Credit points

6 CR

Kind and scope of coursework

Marked coursework:  
1 sketch design (1 week) 30 hrs.  
1 sketch design (1 week) 30 hrs.  
1 sketch design (1 week) 30 hrs.  
1 sketch design (1 week) 30 hrs.  
1 sketch design (1 week) 30 hrs.  
1 sketch design (1 week) 30 hrs.

All of the pieces of assessed coursework are weighted equally for the overall module mark.

Number of possible participants

No limit to the number of participants

Module	<b>CM 05 Dissertation Seminar</b>
Topic	The contents of the dissertation seminar match the topic of the master's dissertation. The module is provided as preparation for the dissertation.
Contents	The theoretical examination of the dissertation topic's design and/or project task should help the write-up process.
Qualification Objective	<p><u>Learning objective:</u> The course aims to support students with the academic and content side of their dissertations.</p> <p><u>Competencies:</u> Ability to integrate creative, typological, architectural, constructional and economic findings into the design process whilst retaining the design qualities.</p>
Types of Teaching and Learning	Seminar
Prerequisites for participation	None
Can be selected for	Compulsory module for students studying the master's degree in Architecture.
Duration	1 semester with 2 SWS
Frequency of offer	Winter and summer semester
Workload	<p><u>Contact hours:</u> 2 SWS (2 x 16 Weeks): 32 h</p> <p><u>Self-study:</u> Preparations and follow-up work: 70 h Coursework assignments: 70 h Examination preparations: 7 h Examination: 30 min</p> <p>total approx. 180 h</p>
Credit points	6 CR
Kind and scope of coursework	<p><u>Assessment Components and Examination:</u> The examiner selects one of the kinds of examination (AP) for the provided topic as stipulated in the examination regulations; and, if applicable, will make the required assessment components known in the first week after the start of the lecture period. Passed assessment components are recognised as 'passed', specific marks will not be given.</p>
Number of possible participants	The members of teaching staff will define any possible limitations for the number of participants and make these known when the course is announced.

Module	<b>CM 06 Master's Dissertation</b>
Topic	Project work on the topic of architecture, urban planning, regional planning and other subject-related topics
Qualification Objective	The students are able to examine the specialisation they chose in the master's degree, both in terms of content and methodology. They apply their academic and/or artistic experiences and can present their work results in a written, graphic and verbal form.
Types of Teaching and Learning	The master's dissertation is an unsupervised piece of work.  Advisory sessions can take place depending on the stage of completion.
Prerequisites for participation	Proof of at least 90 CR gained for the master's degree
Can be selected for	Compulsory module for students studying the master's degree in Architecture.
Duration	12 weeks
Frequency of offer	Summer and winter semester
Workload	<u>Self-study:</u> Assignment: 720 h Preparation for examinations: 99 h Examination: 30 min  total approx. 820 h  Preparation for the examination and the examination itself are not part of the writing-up period of 12 weeks
Credit points	24 CR
Kind and scope of marked coursework:	<u>Marked coursework 1:</u> Project dissertation (weighted with 75 %)  <u>Marked coursework 2:</u> Oral examination M 20 (colloquium) (weighted with 25 %)
Number of possible participants	The members of teaching staff will define any possible limitations for the number of participants and make these known when the course is announced.

Module	<b>CEM I Urban Development and Landscape Architecture</b>
Topic	Structural and spatial look at selected topics and projects in the area of conflict between urban areas and the countryside.
Contents	<p>Due to a growing urbanisation throughout the world and the increasing use of land, which are both connected to high environmental strains, the role of sustainable rural and urban development is changing. The importance of public and private spaces in urban areas has also changed in the midst of post-industrial society. Attention should always be given to how varying needs can be met, without forgetting to look at social, economic, ecological, spatial, traffic and infrastructural aspects.</p> <p>The course looks at contemporary development projects for examining these changing phenomena and identifying the actors involved and design principles being used.</p>
Qualification Objective	<p><u>Learning objective:</u> By analysing and investigating historical and contemporary urban development concepts and links to landscape architecture, students understand the change of planning methods and can identify factors and stakeholders. They recognise their spatial, social and cultural dimension and are in the position to analyse them critically and to take an active part in the discussion regarding their future development.</p> <p><u>Competencies:</u> The students gain the ability to work academically, to evaluate, understand and realise problems from a global perspective. They are able to produce theoretical findings of their own and to adopt them consciously in the design process.</p>
Types of Teaching and Learning	Seminar
Prerequisites for participation	None
Can be selected for	Compulsory elective module for students of the master's degree course in Architecture. Teaching offer for students studying the master's degree in Architectural Lighting Design and Interior Design.
Duration	1 semester with 2 SWS  The contents of two modules can also be joined to increase the scope of the courses to 4 SWS.
Frequency of offer	Winter and summer semester
Workload	<u>Contact hours:</u> 2 SWS (2 x 16 Weeks): 32 h

Self-study:

Preparations and follow-up work: 8 h

Assignment: 40 h

Preparation for examinations: 9 h

Examination: 30 min

total approx. 90 h

Joining of 2 modules:

Contact hours:

4 SWS (4 x 16 Weeks ): 64 h

Self-study:

Preparations and follow-up work: 26 h

Assignment: 90 h

Preparation for examinations: 9 h

Examination: 30 min

total approx. 180 h

Credit points

3 CR

Joining of 2 modules: 6 CR

Kind and scope of marked coursework:

Alternative type of examination in accordance with § 11(1) of the examination regulations.

Number of possible participants

The members of teaching staff will define any possible limitations for the number of participants and make these known when the course is announced.



Module	<b>CEM II Urban Development Theory and Urban Development History</b>
Topic	Differentiated evaluation of selected topics concerning the history and theory of urban areas
Contents	<p>A society's history and culture are mirrored in their towns, buildings and public spaces. Buildings and urban structures outlast several generations and we come across them on a daily basis as witnesses of past times. Those who learn to interpret them correctly, receive access to a comprehensive encyclopaedia of history.</p> <p>The scientific description, comparison, analysis and assessment of architecture and urban areas using individual topics form the focus of this theoretical and historical examination. The course uses subject-specific literature and source material to look at aspects of the history of ideas and intellectual history in urban development theory and reconstruct the history of urban development, thereby investigating the historical background and cultural conditions.</p>
Qualification Objective	<p><u>Learning objective:</u> By analysing and critically examining historical and contemporary urban development concepts and theories, the students gain a global understanding of the emergence and development of the phenomenon ›town‹, consolidate their knowledge of academic methods and develop an individual, theory-based position.</p> <p><u>Competencies:</u> The students gain the ability to evaluate, understand and realise the entire scope of problems. They can independently develop questions and use technical terms confidently. They know how to apply the fundamental methods of comparison, theoretical and historical analysis and how to gain results scientifically. This enables them to use theory critically, to take part in subject-specific discussions with success and to reflect upon the design from a conceptual perspective.</p>
Types of Teaching and Learning	Seminar
Prerequisites for participation	None
Can be selected for	Compulsory elective module for students of the master's degree course in Architecture. Teaching offer for students studying the master's degree in Architectural Lighting Design and Interior Design.
Duration	1 semester with 2 SWS  The contents of two modules can also be joined to increase the scope of the courses to 4 SWS.
Frequency of offer	Winter and summer semester

## Workload

Contact hours:  
2 SWS (2 x 16 Weeks): 32 h

Self-study:

Preparations and follow-up work: 8 h

Assignment: 40 h

Preparation for examinations: 9 h

Examination: 30 min

total approx. 90 h

Joining of 2 modules:

Contact hours:

4 SWS (4 x 16 Weeks): 64 h

Self-study:

Preparations and follow-up work: 26 h

Assignment: 90 h

Preparation for examinations: 9 h

Examination: 30 min

total approx. 180 h

## Credit points

3 CR

Joining of 2 modules: 6 CR

## Kind and scope of marked coursework:

Alternative type of examination (APL) in accordance with § 11(1) of the examination regulations.

## Number of possible participants

The members of teaching staff will define any possible limitations for the number of participants and make these known when the course is announced.

Module	<b>CEM III Design Methods and Architectural Theory</b>
Topic	Theoretical investigation of buildings of modern contemporary architecture based on selected trends and tendencies.
Contents	<p>The course conveys information and knowledge about architecture that can be used as inspiration and insights for the own creative design process. Design processes and design results shall be presented in a comprehensive fashion, and the results will be analysed and evaluated with the goal of transferring them for the students' own design assignments. The teaching objective is to present design strategies and possible solutions, concentrating on general regulations and not formal aspects. Questions pertaining to architectural theory, the consideration of various spatial concepts in architecture and the effect of space on the user, as well as the perception of space will play a key role.</p> <p>The contents of the seminar change from semester to semester. Sourcing relevant literature and the academic evaluation of used sources are part of the classes. If possible, an excursion will be made to the buildings being looked at.</p> <p>The seminars are a supplementary offer of a design assignment.</p>
Qualification Objective	<p><u>Learning objective:</u> Theoretical investigation of selected trends and tendencies of modern architecture for enabling students to grasp and classify the important and influential architectural concepts of today.</p> <p><u>Competencies:</u> Gaining of in-depth competence in the fields of architectural theory and knowledge of current architectural concepts.</p>
Types of Teaching and Learning	Seminar
Prerequisites for participation	None
Can be selected for	Compulsory elective module for students of the master's degree course in Architecture. Teaching offer for students studying the master's degree in Architectural Lighting Design and Interior Design.
Duration	1 semester with 2 SWS
	The contents of two modules can also be joined to increase the scope of the courses to 4 SWS.
Frequency of offer	Winter and summer semester

## Workload

### Contact hours:

2 SWS (2 x 16 Weeks): 32 h

### Self-study:

Preparations and follow-up work: 8 h

Assignment: 40 h

Preparation for examinations: 9 h

Examination: 30 min

Total approx. 90 h

Joining of 2 modules:

### Contact hours:

4 SWS (4 x 16 Weeks): 64 h

### Self-study:

Preparations and follow-up work: 26 h

Assignment: 90 h

Preparation for examinations: 9 h

Examination: 30 min

Total approx. 180 h

## Credit points

3 CR

Joining of 2 modules: 6 CR

## Kind and scope of marked coursework:

Alternative type of examination (APL) in accordance with § 11(1) of the examination regulations.

## Number of possible participants

The members of teaching staff will define any possible limitations for the number of participants and make these known when the course is announced.

Module	<b>CEM IV Planning and Construction of Existing Buildings</b>
Topic	In-depth look at issues regarding the planning and construction of existing buildings.
Contents	<p>This compulsory elective module provides in-depth lectures, seminars and tutorials on subjects related to the special problems caused by addressing historical structures.</p> <p>These include issues related to both urban development and architectural history, preservation of listed monuments, design and building construction.</p>
Qualification Objective	<p><u>Learning objective:</u> By examining the contents and methods of the topics on offer, students shall gain sufficient knowledge and experience to be able to tackle projects related to building work on existing structures.</p> <p><u>Competencies:</u> Gaining of in-depth competencies for handling projects on existing structures.</p>
Types of Teaching and Learning	Seminar
Prerequisites for participation	None
Can be selected for	Compulsory elective module for students of the master's degree course in Architecture. Teaching offer for students studying the master's degree in Architectural Lighting Design and Interior Design.
Duration	<p>1 semester with 2 SWS</p> <p>The contents of two modules can also be joined to increase the scope of the courses to 4 SWS.</p>
Frequency of offer	Winter and summer semester

Workload	<u>Contact hours:</u> 2 SWS (2 x 16 Weeks): 32 h
	<u>Self-study:</u> Preparations and follow-up work: 8 h Assignment: 40 h Preparation for examinations: 9 h Examination: 30 min  Total approx. 90 h  Joining of 2 modules:  <u>Contact hours:</u> 4 SWS (4 x 16 Weeks): 64 h  <u>Self-study:</u> Preparations and follow-up work: 26 h Assignment: 90 h Preparation for examinations: 9 h Examination: 30 min  total approx. 180 h
Credit points	3 CR  Joining of 2 modules: 6 CR
Kind and scope of marked coursework:	Alternative type of examination (APL) in accordance with § 11(1) of the examination regulations.
Number of possible participants	The members of teaching staff will define any possible limitations for the number of participants and make these known when the course is announced.

Module	<b>CEM V Architecture und Environment</b>
Topic	Energy-efficient and resource-saving planning of buildings.
Contents	Consolidation of knowledge about natural systems and the built environment.
Qualification Objective	<p><u>Learning objective:</u> Understanding for topics such as ecological sustainability, designs to reduce energy usage and the effects on the environment, as well as passive systems and how to control them.</p> <p>Raising of awareness for technology and its consequences.</p> <p>Acquisition of knowledge about evaluation systems which use manual and/or electronic means to diagnose the built environment. (certification of sustainability, building life-cycle assessment, ...)</p> <p><u>Competencies:</u> Gaining of in-depth competencies about ecological systems and scientific methods for solving complex assignments.</p> <p>Independent application, development and transfer of integral and environmentally-friendly solutions for complex architectural planning tasks.</p>
Types of Teaching and Learning	Seminar
Prerequisites for participation	None
Can be selected for	Compulsory elective module for students of the master's degree course in Architecture. Teaching offer for students studying the master's degree in Architectural Lighting Design and Interior Design.
Duration	1 semester with 2 SWS
Frequency of offer	Winter and summer semester
Workload	<p><u>Contact hours:</u> 2 SWS (2 x 16 Weeks): 32 h</p> <p><u>Self-study:</u> Preparations and follow-up work: 8 h Assignment: 40 h Preparation for examinations: 9 h Examination: 30 min</p> <p>total approx. 90 h</p>

Joining of 2 modules:

Contact hours:

4 SWS (4 x 16 Weeks): 64 h

Self-study:

Preparations and follow-up work: 26 h

Assignment: 90 h

Preparation for examinations: 9 h

Examination: 30 min

total approx. 180 h

Credit points

3 CR

Joining of 2 modules: 6 CR

Kind and scope of marked  
coursework:

Alternative type of examination (APL) in accordance with § 11(1)  
of the examination regulations.

Number of possible  
participants

The members of teaching staff will define any possible limitations  
for the number of participants and make these known when the  
course is announced.



Module	<b>CEM VI Construction and Technology</b>
Topic	Constructional and technical planning of buildings
Contents	Students receive in-depth tuition in the supporting structure, the shell, the extension and the climate of buildings. Portrayal of various technical and constructional concepts for joining materials, technology and form, using selected examples and exercises, which take an extensive look at the various aspects of planning and construction.
Qualification Objective	<p>Learning objective: The goal of the module is to convey knowledge to allow students to realise their own architectural intentions in an “overall system for structures” which integrates components such as building materials, building construction, supporting structure, shell, extension and building technology. The aspects of design, functionality and sustainability from the concept to the detailed planning are integrated into the planning process.</p> <p>Students are taught innovative strategies with sustainable technologies and building materials as a foundation for their own construction and design activities.</p> <p>Competencies: Acquisition of in-depth academic key competencies for a goal-oriented analysis of the most important parameters, the understanding of dependencies and the joining of components to create an interdisciplinary whole, without forgetting the differentiated level of detail.</p>
Types of Teaching and Learning	Seminar
Prerequisites for participation	None
Can be selected for	Compulsory elective module for students of the master’s degree course in Architecture. Teaching offer for students studying the master’s degree in Architectural Lighting Design and Interior Design.
Duration	1 semester with 2 SWS  The contents of two modules can also be joined to increase the scope of the courses to 4 SWS.
Frequency of offer	Winter and summer semester

Workload	<u>Contact hours:</u> 2 SWS (2 x 16 Weeks): 32 h
	<u>Self-study:</u> Preparations and follow-up work: 8 h Assignment: 40 h Preparation for examinations: 9 h Examination: 30 min  total approx. 90 h Joining of 2 modules:
	<u>Contact hours:</u> 4 SWS (4 x 16 Weeks): 64 h
	<u>Self-study:</u> Preparations and follow-up work: 26 h Assignment: 90 h Preparation for examinations: 9 h Examination: 30 min  total approx. 180 h
Credit points	3 CR  Joining of 2 modules: 6 CR
Kind and scope of marked coursework:	Alternative type of examination (APL) in accordance with § 11(1) of the examination regulations.
Number of possible participants	The members of teaching staff will define any possible limitations for the number of participants and make these known when the course is announced.

Module	<b>CEM VII Building Economics, Building Law, Management</b>
Topic	Consolidation of topics concerning building economics, building law and management
Contents	<p>Elective options for gaining advanced knowledge in the following fields</p> <p>e.g. building economics: Building economics using a practice example, building economics and building work to existing buildings, tender processes, contracting, accounting</p> <p>e.g. building law: Specialisation seminar for building law and liability, building law and the culture of building, building operations and calculation, accessible buildings</p> <p>e.g. management: International design management, management using a practice example</p>
Qualification Objective	<p><u>Learning objective:</u> Compulsory elective modules serve to help the students create a profile. The aim of WPM VII is to attain in-depth knowledge, above all in the realisation and implementation of topics related to building economics, building law and management.</p> <p><u>Competencies:</u> Acquisition of in-depth competencies in the fields of building economics, building law and management in the building sector.</p>
Types of Teaching and Learning	Seminar
Prerequisites for participation	None
Can be selected for	Compulsory elective module for students of the master's degree course in Architecture. Teaching offer for students studying the master's degree in Architectural Lighting Design and Interior Design.
Duration	<p>1 semester with 2 SWS</p> <p>The contents of two modules can also be joined to increase the scope of the courses to 4 SWS.</p>
Frequency of offer	Winter and summer semester

Workload	<u>Contact hours:</u> 2 SWS (2 x 16 Weeks): 32 h
	<u>Self-study:</u> Preparations and follow-up work: 8 h Assignment: 40 h Preparation for examinations: 9 h Examination: 30 min  total approx. 90 h  Joining of 2 modules:
	<u>Contact hours:</u> 4 SWS (4 x 16 Weeks): 64 h
	<u>Self-study:</u> Preparations and follow-up work: 26 h Assignment: 90 h Preparation for examinations: 9 h Examination: 30 min  total approx. 180 h
Credit points	3 CR  Joining of 2 modules: 6 CR
Kind and scope of marked coursework:	Alternative type of examination (APL) in accordance with § 11(1) of the examination regulations.
Number of possible participants	The members of teaching staff will define any possible limitations for the number of participants and make these known when the course is announced.

Module	<b>CEM VIII Architectural Visualisation and Presentation</b>
Topic	Visualisation and presentation using analogue and digital techniques such as models, graphics and photography
Contents	<p>This compulsory elective module covers various aspects of architectural simulation and presentation techniques.</p> <p>It teaches knowledge of various programmes from CAAD, CAM, graphics and photo editing, of how to combine them realistically for application and how to practise the standards. The development of computer-aided visualisation skills focuses on the creation of digital architectural models, objects and scenes, texturing, lighting and rendering.</p> <p>The consolidation of CAM focuses on the creation of digital architectural models and objects that are produced in the workshop using the corresponding machines (3D printer, cutting plotter, mills etc.).</p> <p>The compulsory elective module provides exercises to match the respective contents.</p>
Qualification Objective	<p><u>Learning objective:</u> The goal is to teach students in-depth knowledge of various visualisation and presentation techniques.</p> <ul style="list-style-type: none"> <li>- Getting to know digital and analogue presentation techniques</li> <li>- Working with various presentation programmes</li> <li>- Architectural visualisation / 3DModelling, Lighting, Rendering</li> <li>- Working with Computer Aided Manufacturing</li> </ul> <p><u>Competencies:</u> Gaining of in-depth knowledge of architectural simulation and visual presentation techniques. The students gain the ability to recognise which type of presentation is best-suited for the respective design concept. They recognise that both analogue and digital techniques can be suitable for attaining the goal. The compulsory elective module teaches students the basic skills for using various visualisation programmes. These skills are applied to practice exercises.</p>
Types of Teaching and Learning	Seminar
Prerequisites for participation	None
Can be selected for	Compulsory elective module for students of the master's degree course in Architecture. Teaching offer for students studying the master's degree in Architectural Lighting Design and Interior Design.
Duration	1 semester with 2 SWS

The contents of two modules can also be joined to increase the scope of the courses to 4 SWS.

Frequency of offer	Winter and summer semester
Workload	<p><u>Contact hours:</u> 2 SWS (2 x 16 Weeks): 32 h</p> <p><u>Self-study:</u> Preparations and follow-up work: 8 h Assignment: 40 h Preparation for examinations: 9 h Examination: 30 min</p> <p>total approx. 90 h</p> <p>Joining of 2 modules:</p> <p><u>Contact hours:</u> 4 SWS (4 x 16 Weeks): 64 h</p> <p><u>Self-study:</u> Preparations and follow-up work: 26 h Assignment: 90 h Preparation for examinations: 9 h Examination: 30 min</p> <p>total approx. 180 h</p>
Credit points	3 CR  Joining of 2 modules: 6 CR
Kind and scope of marked coursework:	Alternative type of examination (APL) in accordance with § 11(1) of the examination regulations.
Number of possible participants	The members of teaching staff will define any possible limitations for the number of participants and make these known when the course is announced.

Module	<b>CEM IX Artistic Design</b>
Topic	Fine arts in space and time
Contents	<p>Courses are provided for consolidating and training artistic skills that were attained previously in the fields of drawing, modelling and painting. The starting point is the human body and its relationship to the natural and architectural environments.</p> <p>The course also provides knowledge of art theory and art history in the context of shape, space and time.</p> <p>The gained skills can be tested during the realisation of own artistic projects in real places to help foster their own creativity. Emphasis is placed on the experimental character of these activities.</p>
Qualification Objective	<p><u>Learning objective:</u> Fostering of own creativity. Intellectual understanding of contemporary theories and forms of expression in artistic composition.</p> <p><u>Competencies:</u> Ability to critically reflect on art.</p>
Types of Teaching and Learning	Seminar
Prerequisites for participation	None
Can be selected for	Compulsory elective module for students of the master's degree course in Architecture. Teaching offer for students studying the master's degree in Architectural Lighting Design and Interior Design.
Duration	<p>1 semester with 2 SWS</p> <p>The contents of two modules can also be joined to increase the scope of the courses to 4 SWS.</p>
Frequency of offer	Winter and summer semester

Workload	<u>Contact hours:</u> 2 SWS (2 x 16 Weeks): 32 h
	<u>Self-study:</u> Preparations and follow-up work: 8 h Assignment: 40 h Preparation for examinations: 9 h Examination: 30 min  total approx. 90 h  Joining of 2 modules:  <u>Contact hours:</u> 4 SWS (4 x 16 Weeks): 64 h  <u>Self-study:</u> Preparations and follow-up work: 26 h Assignment: 90 h Preparation for examinations: 9 h Examination: 30 min  total approx. 180 h
Credit points	3 CR  Joining of 2 modules: 6 CR
Kind and scope of marked coursework:	Alternative type of examination (APL) in accordance with § 11(1) of the examination regulations.
Number of possible participants	The members of teaching staff will define any possible limitations for the number of participants and make these known when the course is announced.



Module	<b>CEM X General Science and the Humanities</b>
Topic	Topics from culture, politics/society, industry and science
Contents	<p>By effectively using the full extent of offers provided by the various faculties and possible complementary offers at other university facilities, topics can be selected that comprise an academic reflection of developments that are related in some way to architecture and environment, culture and society, industry and science.</p> <p>The topics can take an academic look at issues of sustainability and resource efficiency. Society, social responsibility and architecture are just as relevant for future architects as topics such as culture, communication and media. Academic investigations of commercial and regional development cycles can represent relevant topics for the students' specialisation. Architectural history, the development of theory in cultural studies, scientific research or the philosophical reflection of architecture are further possible topics.</p>
Qualification Objective	<p><u>Learning objective:</u> Gaining knowledge of philological, artistic, scientific, epistemological or philosophical methods in an architectural, urban and environmental context.</p> <p><u>Qualification Objective</u> Sound command of scientific methods, interdisciplinary ways of thinking and complex approach to issues that are relevant to society.</p>
Types of Teaching and Learning	Seminar
Prerequisites for participation	None
Can be selected for	Compulsory elective module for students of the master's degree course in Architecture. Teaching offer for students studying the master's degree in Architectural Lighting Design and Interior Design.
Duration	<p>1 semester with 2 SWS</p> <p>The contents of two modules can also be joined to increase the scope of the courses to 4 SWS.</p>
Frequency of offer	Winter and summer semester

Workload	<u>Contact hours:</u> 2 SWS (2 x 16 Weeks): 32 h
	<u>Self-study:</u> Preparations and follow-up work: 8 h Assignment: 40 h Preparation for examinations: 9 h Examination: 30 min  Total approx. 90 h  Joining of 2 modules:  <u>Contact hours:</u> 4 SWS (4 x 16 Weeks): 64 h  <u>Self-study:</u> Preparations and follow-up work: 26 h Assignment: 90 h Preparation for examinations: 9 h Examination: 30 min  total approx. 180 h
Credit points	3 CR  Joining of 2 modules: 6 CR
Kind and scope of marked coursework:	Alternative type of examination (APL) in accordance with § 11(1) of the examination regulations.
Number of possible participants	The members of teaching staff will define any possible limitations for the number of participants and make these known when the course is announced.