

# **Module Handbook**

## **Architecture**

### **(Architektur)**

Faculty of Architecture and Civil Engineering  
Hochschule **RheinMain** | University of Applied Sciences

### **Bachelor of Science (B.Sc.)**

#### **IMPORTANT**

Please note that this is an English translation of the German module handbook intended to give an overview of the degree program's curriculum and teaching contents. This document is for information purposes only and is not legally binding.

## MODULES AND COURSES

<b>Design Studio A: Space and Form .....</b>	<b>1</b>
Design Studio A: Space and Form.....	2
Integration: Design Basics and Visual Representation.....	3
<b>Basics and Theory 1 .....</b>	<b>4</b>
Architectural Theory 1.....	5
Building Design Theory 1 .....	6
<b>Design Basics and Visual Representation 1 .....</b>	<b>7</b>
Foundations of Design 1 .....	8
CAAD 1.....	9
<b>Elective Module 1 .....</b>	<b>10</b>
See Elective Modules .....	11
<b>Elective Modules .....</b>	<b>12</b>
Adaptive Building Facades .....	13
Selected Chapters of Building Survey .....	14
Selected Chapters of Architectural History .....	15
Selected Chapters of Architectural History .....	16
Field Trip – Designing with the Existing .....	17
Interdisciplinary Field Trip – Field Trip.....	18
Spatial Experiments.....	19
House Archive.....	20
Historical Urban Development.....	21
Climate-Oriented Construction.....	22
Material Sample.....	23
Model Making.....	24
Room Simulation – Building with Light .....	25
Steel Construction.....	26
urban.research.....	27
Academic Research and Writing .....	28
Historical Buildings Today.....	29
Fairfaced Concrete Constructions.....	30
From Passive House to Plus-Energy House.....	31
<b>Design Studio B: Space and Function .....</b>	<b>32</b>

Design Studio B: Space and Function .....	33
Integration: Building Design Theory .....	34
<b>Basics and Theory 2 .....</b>	<b>35</b>
Building Design Theory 2 .....	36
Architectural History 1.....	37
<b>Building Technologies 1 .....</b>	<b>38</b>
Structural Design 1 .....	39
Material Science.....	40
<b>Design Basics and Visual Representation 2 .....</b>	<b>41</b>
Foundations of Design 2 .....	42
CAAD 2.....	43
<b>Elective Module 2 .....</b>	<b>44</b>
See Elective Modules .....	45
<b>Design Studio C: Volume and Structure.....</b>	<b>46</b>
Design Studio C: Volume and Structure.....	47
Integration: Construction .....	48
<b>Basics and Theory 3.....</b>	<b>49</b>
Urban Design 1 .....	50
Architectural History 2 .....	51
Architectural Theory 2.....	52
<b>Building Technologies 2 .....</b>	<b>53</b>
Building Construction 1 .....	54
Structural Design 2 .....	55
<b>Design Basics and Visual Representation 3.....</b>	<b>56</b>
Digital Design.....	57
<b>Elective Module 3 .....</b>	<b>58</b>
See Elective Modules .....	59
<b>Design Studio D: The City and the Urban Realm.....</b>	<b>60</b>
Design Studio D: The City and the Urban Realm.....	61
Integration: Urban Design and Energy Design .....	62
<b>Basics and Theory 4.....</b>	<b>63</b>
Urban Design 2 .....	64
Building Research.....	65
<b>Building Technologies 3 .....</b>	<b>66</b>

Structural Design 3 .....	67
Climate Design .....	68
Building Construction 2 .....	69
<b>Elective Module 4 .....</b>	<b>70</b>
See Elective Modules .....	71
<b>Internship .....</b>	<b>72</b>
Internship.....	73
<b>Construction Management 1 .....</b>	<b>74</b>
Internship Preparation and Monitoring.....	75
<b>Elective Module 5 .....</b>	<b>76</b>
See Elective Modules .....	77
<b>Design Studio E: Building and Program.....</b>	<b>78</b>
Design Studio E: Building and Program .....	79
Integration: Interior Design / Building Envelope.....	80
<b>Building Technologies 4 .....</b>	<b>81</b>
Building Envelope .....	82
Interior, Material, Light .....	83
<b>Building Technologies 5 .....</b>	<b>84</b>
Energy Design.....	85
Acoustics .....	86
<b>Construction Management 2 .....</b>	<b>87</b>
Construction Management.....	88
<b>Elective Module 6 .....</b>	<b>89</b>
See Elective Modules .....	90
<b>Ad Hoc .....</b>	<b>91</b>
<b>Bachelor's Thesis.....</b>	<b>92</b>
Bachelor's Thesis .....	93
<b>Colloquium .....</b>	<b>94</b>
<b>Theoretical Seminar.....</b>	<b>95</b>

<b>Module Title</b>	<b>Design Studio A: Space and Form</b>
Module Title (German)	Projekt A: Raum und Form
Code	1100
Language of Instruction	German
Recommended Semester(s)	1
Module offered in	Every semester
Competen- cies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>First examination of architectural questions:</p> <ul style="list-style-type: none"> <li>• Basic knowledge of the properties of architectural space</li> <li>• Basic experience in dealing with the methodology of architectural design</li> <li>• Acquisition of conceptual and creative thinking and action, acquisition of basic visual representation and communication skills, as well as personal means of expression</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	10 CP
Module Cour- ses	Design Studio A: Space and Form Integration: Design Basics and Visual Representation

<b>Course Title</b>	<b>Design Studio A: Space and Form</b>
Course Title (German)	Projektarbeit A
Language of Instruction	German
Recommended Semester(s)	1
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Basic experience in dealing with the methodology of architectural design</li> <li>• First examination of architectural questions</li> <li>• Basic knowledge of the properties of architectural space in terms of spatial, functional, and structural relationships</li> <li>• Acquisition of conceptual and creative thinking and action</li> </ul>
Topics/Course Contents	The development of architectural space is tested and practiced by means of simple design practice.
Credit Points	8 CP
Module	Design Studio A: Space and Form

<b>Course Title</b>	<b>Integration: Design Basics and Visual Representation</b>
Course Title (German)	Integration: Darstellung und Gestaltung
Language of Instruction	German
Recommended Semester(s)	1
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Knowledge of the basic methods and strategies of design and their influence on the design of architectural space</li> <li>• Training multisensory perception and design skills</li> <li>• Basic knowledge of the tools of architectural representation</li> <li>• Acquisition of basic visual representation and communication skills, as well as personal means of expression</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Developing, applying, and experimenting with basic methods and strategies of visual and three-dimensional design in the design process.</li> <li>• Introduction to basic visual representation and communication techniques</li> </ul>
Credit Points	2 CP
Module	Design Studio A: Space and Form

<b>Module Title</b>	<b>Basics and Theory 1</b>
Module Title (German)	Grundlagen und Theorie 1
Code	1110
Language of Instruction	German
Recommended Semester(s)	1
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>The module is the basis for:</p> <ul style="list-style-type: none"> <li>• The academic examination of architecture and the objective and differentiated evaluation thereof</li> <li>• A conceptual approach to design in connection with typological and functional parameters of buildings</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Courses	Architectural Theory 1 Building Design Theory 1



<b>Course Title</b>	<b>Architectural Theory 1</b>
Course Title (German)	Architekturtheorie 1
Language of Instruction	German
Recommended Semester(s)	1
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Dealing with formal and theoretical aspects of architecture</li> <li>• Acquisition of analytical review skills</li> <li>• Application of principles of design and order</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Introduction to the theory of architectural space</li> <li>• Excursus: human perception systems</li> <li>• How architectural principles of order provide assistance for own design work</li> </ul>
Credit Points	4 CP
Module	Basics and Theory 1

<b>Course Title</b>	<b>Building Design Theory 1</b>
Course Title (German)	Gebäudelehre 1
Language of Instruction	German
Recommended Semester(s)	1
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Introduction to different typologies in the field of housing construction</li> <li>• Understanding congruence between use and structural form</li> <li>• Acquisition of basic knowledge in connection with spatial and sociological aspects</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Typological and analytical review of housing construction based on outstanding architectural examples</li> <li>• Building typology laws</li> <li>• Different aspects and typologies of contemporary housing construction. The central themes are: the role of development, the internal arrangement of living spaces and the nature of open spaces.</li> </ul>
Credit Points	2 CP
Module	Basics and Theory 1

<b>Module Title</b>	<b>Design Basics and Visual Representation 1</b>
Module Title (German)	Gestaltung und Darstellung 1
Code	1140
Language of Instruction	German
Recommended Semester(s)	1
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <ul style="list-style-type: none"> <li>• Knowledge of the basic methods and strategies of design and their influence on the design of architectural space</li> <li>• Training multisensory perception and design skills</li> <li>• Basic knowledge of the tools of architectural representation</li> <li>• Acquisition of basic visual representation and communication skills, as well as personal means of expression</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	12 CP
Module Courses	Foundations of Design 1 CAAD 1

<b>Course Title</b>	<b>Foundations of Design 1</b>
Course Title (German)	Grundlagen der Gestaltung 1
Language of In- struction	German
Recommended Semester(s)	1
Course offered in	Every semester
Competen- cies/Learning Objectives	<ul style="list-style-type: none"> <li>• Basic knowledge about the fundamentals of perception, aesthetics, form theory, the methodology of design</li> <li>• Development of visual, perceptive, and imaginative skills</li> <li>• Dealing with questions of visual and three-dimensional design with regard to use, appearance, and impact potential</li> <li>• Gaining experience in dealing with methods and means of design, with the transformation of the abstract into concrete form</li> <li>• Acquiring basic skills of expression and visual representation in various media for the development and communication of architectural design ideas</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Theoretical principles in the field of perception, aesthetics, form theory and methodology</li> <li>• Training sensory and perceptive skills, gaining initial experience with materials and space</li> <li>• Developing, applying, and experimenting with basic methods and strategies of visual and three-dimensional design</li> <li>• Introduction to basic visual representation and communication techniques in the field of analog and digital drawing, freehand drawing, perspective, descriptive geometry, the basics of digital graphics processing (layout/typography/image processing), model making</li> </ul>
Credit Points	8 CP
Module	Design Basics and Visual Representation 1

<b>Course Title</b>	<b>CAAD 1</b>
Course Title (German)	CAAD 1
Language of Instruction	German
Recommended Semester(s)	1
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Basic knowledge of digital modelling and visualization in the design process</li> <li>• Ability to display simpler architectural designs in 3D (space, object) and 2D (drawing)</li> <li>• Use of 3D modelling to review, optimize, and communicate architectural design ideas</li> <li>• Acquire basic expression and visual representation skills in dealing with CAAD</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Basic modeling of buildings and space (geometry)</li> <li>• Texturing, materiality, exposure to light and lighting as additional statement (surface and context)</li> <li>• Representation of space/object in 3D (real-time visualization) and in drawings (CAD)</li> <li>• Appropriateness of degrees of abstraction</li> <li>• Learning to use the necessary software</li> </ul>
Credit Points	4 CP
Module	Design Basics and Visual Representation 1

<b>Module Title</b>	<b>Elective Module 1</b>
Module Title (German)	Wahlpflichtmodul 1
Code	1150
Language of In- struction	German / English
Recommended Semester(s)	1
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>Broadening and deepening specialist knowledge and instrumental, sys- temic, and communicative skills, according to inclination and interests</p> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	2 CP
Module Courses	See Elective Modules

<b>Course Title</b>	<b>See Elective Modules</b>
Course Title (German)	Siehe Wahlpflichtangebot
Language of Instruction	German
Recommended Semester(s)	1
Course offered in	Every semester
Competencies/Learning Objectives	The course contributes to the learning outcomes of the module by developing the given topics/contents
Topics/Course Contents	
Credit Points	2 CP
Module	Elective Module 1

<b>Module Title</b>	<b>Elective Modules</b>
Module Title (German)	Wahlpflichtangebot
Code	1150
Language of In- struction	German / English
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>Broadening and deepening specialist knowledge and instrumental, sys- temic, and communicative skills, according to inclination and interests</p> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	12 CP
Module Courses	Elective Modules

\*The range of electives on offer is continuously updated and can therefore vary from semester to semester.

The respective current range is published in the annotated course catalog



<b>Course Title</b>	<b>Adaptive Building Facades</b>
Course Title (German)	Adaptive Gebäudehüllen
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Basic knowledge of periodic dynamics of building physics processes inside and outside the building facade and the resulting material and construction strategies</li> <li>• Ability to critically reflect on relevant norms and common principles of facade design which are based on a purely static analysis</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Development of possible strategies for dynamic and reversible adaptation of the physical properties of building facades</li> <li>• Analysis of the climatic potentials depending on constructional and energetic expense</li> <li>• Assessment of design possibilities and limitations</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>Selected Chapters of Building Survey</b>
Course Title (German)	Ausgewählte Kapitel der Baudokumentation
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Basic knowledge of different methods of building documentation</li> <li>• Knowledge and application of tachymetric building surveys</li> <li>• Creating detailed plans of a historical building</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Surveying, drawing, and evaluating a selected, historically interesting building or ensemble of buildings as a block seminar</li> <li>• Graphic analysis of the survey and preparation of ground plans, views and cross-sections, preparation of photographic documentation</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>Selected Chapters of Architectural History</b>
Course Title (German)	Ausgewählte Kapitel der Baugeschichte
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Historical references within a period of architectural history</li> <li>• Analysis of historical buildings, their evaluation and classification</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Introduction to the methodology of architectural history research</li> <li>• Analysis of historical buildings on site and in literature</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>Selected Chapters of Architectural History</b>
Course Title (German)	Ausgewählte Kapitel der Baugeschichte
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Historical references within a period of architectural history</li> <li>• Analysis of historical buildings, their evaluation and classification</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Introduction to the methodology of architectural history research</li> <li>• Analysis of historical buildings on site and in literature</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>Field Trip – Designing with the Existing</b>
Course Title (German)	Exkursion – Bauen mit Bestand
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Ability to critically analyze and document historical buildings and building ensembles and their extension, reconstruction, and renovation</li> <li>• Application of scientific and social findings in own independent evaluation of historical buildings</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Own independent research of buildings and building ensembles and their extension, reconstruction, and renovation, primarily since 1870</li> <li>• On-site inspection as part of the excursion</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>Interdisciplinary Field Trip – Field Trip</b>
Course Title (German)	Exkursion Interdisziplinär – Studienfahrt im Spektrum von Architektur, Kunst und Design
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Discovering new perspectives on contemporary and historical architecture, urban planning, art and design and their perception</li> <li>• Acquiring further skills for the classification of architecture, city, art, and design and for the development and reflection of one's own point of view</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Analysis of current and historical examples of architecture, urban planning, art, and design</li> <li>• As preparation for excursions: review of the examples to be visited and inspection of the same</li> <li>• Documentation and reflection of the inspected architecture</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>Spatial Experiments</b>
Course Title (German)	Raumexperimente
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Specialized technical and experimental creation and design of space</li> <li>• Own independent application of creative and conceptual competences and reflection on these</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Experimental approaches to the generation and formulation of spatial qualities depending on material and methodology</li> <li>• Analysis of formal principles, structures, and systems from various fields</li> <li>• Further development of own approaches and means of expression, especially in the construction of models</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>House Archive</b>
Course Title (German)	HausArchiv
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• In-depth analysis of historical buildings, their classification, documentation, and evaluation</li> <li>• Application of scientific and social findings in own independent analysis and evaluation of historical buildings</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Own independent research of buildings since 1870</li> <li>• Selection of typical examples of buildings built during the construction period</li> <li>• Photographic documentation</li> <li>• Scientific and social findings for the analysis and evaluation of historical buildings</li> </ul>
Credit Points	2 CP
Module	Elective Modules



<b>Course Title</b>	<b>Historical Urban Development</b>
Course Title (German)	Historische Stadtentwicklung
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Analysis of historical contexts in construction</li> <li>• Architecture and building culture in smaller urban spaces, districts, or entire cities</li> <li>• Extended knowledge of the history of building and urban development</li> <li>• Learning to carry out independent scientific work</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Students work on a research topic of their own choice, within the framework of a superordinate question on urban issues.</li> <li>• Investigations of and in cities from antiquity to modern times</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>Climate-Oriented Construction</b>
Course Title (German)	Klimagerechtes Bauen
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Specialized knowledge of the different climate zones and resulting climate-adapted architectural strategies</li> <li>• Ability to systematically analyze and critically reflect the necessary resource consumption and use of technology in the production and operation of buildings</li> <li>• Ability to independently carry out projects in an application-oriented way</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Develop a repertoire of historical and contemporary autochthonous typologies</li> <li>• Analyze applied architectural strategies depending on local climatic conditions</li> <li>• Evaluation and categorization in the context of the current discourse on sustainability</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>Material Sample</b>
Course Title (German)	Materialprobe
Language of In- struction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competen- cies/Learning Objectives	<ul style="list-style-type: none"> <li>• In-depth knowledge of materials for architecture</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Extensive knowledge of materials is necessary to translate a design into built architecture.</li> <li>• Knowledge of materials for architecture               <ul style="list-style-type: none"> <li>◦ Building Technologies 1 (Material Science)</li> </ul> </li> <li>• The acquired basic knowledge on materials from the lectures Material Science 1 and 2 are expanded in this seminar. For this purpose, material properties are researched, material samples are created, and possible applications are documented.</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>Model Making</b>
Course Title (German)	Modellbau
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Ability to build and design complex architectural models that meet relevant aesthetic and design requirements</li> <li>• Own independent application of the methods to represent and complement the design process</li> <li>• Ability to critically reflect and evaluate one's own models</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Model building techniques</li> <li>• Model building materials for architectural modelling, conceptual model building techniques, basic tools/tool techniques, computer-aided model making</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>Room Simulation – Building with Light</b>
Course Title (German)	Raumsimulation – Bauen mit Licht
Language of In- struction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competen- cies/Learning Objectives	<ul style="list-style-type: none"> <li>• Since the classical means of presenting architecture do not fully do justice to the phenomenon of light, students develop a "catalog of experience" through observation (viewing built examples) and empirical experiments (experiments in the lighting laboratory) from which conclusions can be drawn by analogy for their own work.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• The quantitative and qualitative aspects of light and its creative potential are dealt with on the basis of a variety of topics.</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>Steel Construction</b>
Course Title (German)	Stahlbau
Language of In- struction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competen- cies/Learning Objectives	<ul style="list-style-type: none"> <li>• Special features when designing with the material steel</li> <li>• Extended knowledge of structural and constructional processes in connection with the material steel</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Students acquire design and construction skills.</li> <li>• history of steel construction, structural principles, typical structural design constructions, semi-finished steel products, cast steel, special steel constructions, steel composite constructions, fire protection in steel construction, production techniques, special technologies</li> <li>• Seminar presentations on selected examples impart further knowledge of the architectural impact and the technology of building with structural steel constructions. A complementary excursion completes the seminar.</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>urban.research</b>
Course Title (German)	urban.research
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Students acquire knowledge of theoretical and methodological models of urban design.</li> <li>• Analysis of important texts, their evaluation and categorization in the context of the specialist discourse</li> </ul>
Topics/Course Contents	<p>Discourse on urban design theory based on important texts – such as:</p> <ul style="list-style-type: none"> <li>• L'architettura della citta (Rossi)</li> <li>• Die Stadt in der Stadt (Ungers) Collage City (Rowe)</li> <li>• Learning from Las Vegas (Venturi) and others</li> </ul> <p>or on groundbreaking terminology such as character, context, flexibility, transparency, order, or type (Adrian Forthy, Words and Buildings)</p>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>Academic Research and Writing</b>
Course Title (German)	Wissenschaftliches Arbeiten für Architekten
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Research techniques</li> <li>• Knowledge management</li> <li>• Preparation of scientific texts</li> <li>• Knowledge of formal and legal requirements</li> <li>• Text review</li> <li>• Media competence</li> <li>• Presentation techniques</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Elaboration of the current state of knowledge or research on a specific topic of architecture</li> <li>• Preparation of a text on the previously researched content in accordance with scientific criteria</li> <li>• Review of the texts produced in the seminar</li> <li>• Preparation and presentation of the work results for publication</li> </ul>
Credit Points	2 CP
Module	Elective Modules



<b>Course Title</b>	<b>Historical Buildings Today</b>
Course Title (German)	Historische Bauten heute
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Students familiarize themselves with and evaluate historical buildings and their qualities.</li> <li>• Initiation of a personal discourse as a prospective architect in the area of conflict between existing cultural values and the planning tasks that arise</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Historical buildings, especially from the region, are presented.</li> <li>• Exemplary architectural solutions in dealing with existing historical buildings are highlighted.</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>Fairfaced Concrete Constructions</b>
Course Title (German)	Sichtbeton
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Specialized design and construction skills</li> <li>• Own independent application of knowledge of the relevant design, constructional and structural dependencies in connection with fairfaced concrete constructions</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Seminar presentations on selected examples impart further knowledge of the architectural impact and the technology of construction with fairfaced concrete.</li> <li>• Workshops on formwork manufacturers and a complementary excursion complete the seminar.</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Course Title</b>	<b>From Passive House to Plus-Energy House</b>
Course Title (German)	Vom Passivhaus zum Plusenergiehaus
Language of Instruction	German
Recommended Semester(s)	1, 2, 3, 4, 5, 6, 7
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Specialized knowledge of the current standards for energy-efficient construction, especially passive house standards and plus energy standards</li> <li>• Ability to systematically analyze and critically reflect the respective target definition as well as the individual underlying building and construction principles and elements</li> <li>• Ability to independently carry out design projects in an application-oriented way</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Repertoire of exemplary energy-efficient buildings</li> <li>• Analysis of the principles, structures and technologies used. Evaluation of the achieved results, taking into account the required use of materials and energy</li> </ul>
Credit Points	2 CP
Module	Elective Modules

<b>Module Title</b>	<b>Design Studio B: Space and Function</b>
Module Title (German)	Projekt B: Raum und Funktion
Code	1200
Language of Instruction	German
Recom- mended Se- mester(s)	2
Module offe- red in	Every semester
Competen- cies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>The module is the basis for:</p> <ul style="list-style-type: none"> <li>• The ability to create architectural designs that meet both aesthetic and technical requirements</li> <li>• Understanding the relationship between people and buildings and between buildings and their environment and understanding the necessity of relating buildings and the spaces between them to human needs and standards</li> <li>• Understanding the methods used to review and revise plans for design projects</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	10 CP
Module Cour- ses	Design Studio B: Space and Function Integration: Building Design Theory

<b>Course Title</b>	<b>Design Studio B: Space and Function</b>
Course Title (German)	Projektarbeit B
Language of Instruction	German
Recommended Semester(s)	2
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Students acquire the ability to recognize spatial, functional, and constructional interrelationships in architecture and to develop solutions based on a practical, independently developed architectural project.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Basics of building design theory</li> <li>• Basics of design</li> <li>• Basics of structural and constructional design</li> <li>• Creation of a building design</li> </ul>
Credit Points	8 CP
Module	Design Studio B: Space and Function

<b>Course Title</b>	<b>Integration: Building Design Theory</b>
Course Title (German)	Integration: Gebäudelehre
Language of Instruction	German
Recommended Semester(s)	2
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Students acquire the ability to recognize functional conditions of architecture in connection with spatial, constructional, and social aspects.</li> <li>• They acquire the competence to apply these skills to construction tasks which are not part of the project work.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Introduction to the typology and function of different construction tasks and their interrelation with spatial, constructional, and social aspects</li> </ul>
Credit Points	2 CP
Module	Design Studio B: Space and Function

<b>Module Title</b>	<b>Basics and Theory 2</b>
Module Title (German)	Grundlagen und Theorie 2
Code	1210
Language of In- struction	German
Recommended Semester(s)	2
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>The students acquire deeper knowledge and a basic understanding of</p> <ul style="list-style-type: none"> <li>• Typologies of public-sector construction</li> <li>• The congruence between use and structural form</li> <li>• In connection with spatial, structural aspects</li> </ul> <p>At the same time, students acquire a critical awareness of architecture and its social/sociological background and of cultural and historical topics.</p> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Courses	Building Design Theory 2 Architectural History 1

<b>Course Title</b>	<b>Building Design Theory 2</b>
Course Title (German)	Gebäudelehre 2
Language of Instruction	German
Recommended Semester(s)	2
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Introduction to the typologies of public-sector construction in the field of administrative buildings, libraries, school buildings, museums, places of worship, sports, and transport facilities</li> <li>• Understanding the congruence between use and structural form. Acquisition of basic knowledge in connection with spatial, structural, and constructional aspects</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Typological and analytical review of different construction tasks on the basis of outstanding architectural examples</li> <li>• Building typology principles</li> </ul>
Credit Points	4 CP
Module	Basics and Theory 2



<b>Course Title</b>	<b>Architectural History 1</b>
Course Title (German)	Baugeschichte 1
Language of In- struction	German
Recommended Semester(s)	2
Course offered in	Every semester
Competen- cies/Learning Objectives	<ul style="list-style-type: none"> <li>• Knowledge of European architecture and its builders in the context of the respective conditions of the time; history of urban construction; spatial and form theory</li> <li>• Determination of essential architectural terms, knowledge of the most significant construction forms, learning the method of historical - critical work</li> <li>• Embedding historical buildings and cities in their current and historical contexts</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Review of the entire historical spectrum from antiquity to the 18th century (from the first settlements and advanced civilizations, through antiquity, early Christianity, to medieval architecture and the beginning of the modern and baroque period)</li> <li>• Categorization in the context of the historical and biographical conditions</li> </ul>
Credit Points	2 CP
Module	Basics and Theory 2

<b>Module Title</b>	<b>Building Technologies 1</b>
Module Title (German)	Bautechnik 1
Code	1220
Language of In- struction	German
Recommended Semester(s)	2
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>The module provides the basics for the ability and competence:</p> <ul style="list-style-type: none"> <li>• To develop solutions for structural and structural design tasks</li> <li>• To select materials according to their different haptic, structural, and physical properties and to incorporate them into simple architectural concepts</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Courses	Structural Design 1 Material Science

<b>Course Title</b>	<b>Structural Design 1</b>
Course Title (German)	Tragwerkslehre 1
Language of Instruction	German
Recommended Semester(s)	2
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>The students acquire the ability to understand the basic criteria of structural design and shell construction in order to understand and apply the basics of structural design.</li> </ul>
Topics/Course Contents	Fundamentals of structural design and shell construction: <ul style="list-style-type: none"> <li>Loads, forces, torques, force tracking in the building, equilibrium of forces</li> <li>Basics of timber construction, concrete construction, steel construction, special materials</li> </ul>
Credit Points	2 CP
Module	Building Technologies 1

<b>Course Title</b>	<b>Material Science</b>
Course Title (German)	Baustofflehre
Language of Instruction	German
Recommended Semester(s)	2
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Knowledge of building materials fundamental to architecture (ceramics, clay, wood, concrete, steel, glass, natural stone, insulation, plaster)</li> <li>• Basic knowledge of the assessment and classification of materials</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Aspects of occurrence, origin, processing methods, chemical composition, cycles of matter, physical and environmental characteristics of materials as well as sensory aspects and examples of use</li> </ul>
Credit Points	4 CP
Module	Building Technologies 1

<b>Module Title</b>	<b>Design Basics and Visual Representation 2</b>
Module Title (German)	Gestaltung und Darstellung 2
Code	1240
Language of In- struction	German
Recommended Semester(s)	2
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <ul style="list-style-type: none"> <li>• Extended knowledge of the basic methods and strategies of design and their influence on the design of architectural space</li> <li>• Advanced multi-sensory perception and design skills</li> <li>• Extended knowledge of tools to visually represent architecture</li> <li>• Further visual representation and communication skills as well as the development of personal means of expression</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Courses	Foundations of Design 2 CAAD 2

<b>Course Title</b>	<b>Foundations of Design 2</b>
Course Title (German)	Grundlagen der Gestaltung 2
Language of In- struction	German
Recommended Semester(s)	2
Course offered in	Every semester
Competen- cies/Learning Objectives	<ul style="list-style-type: none"> <li>• Extended basic knowledge about the basics of perception, aesthetics, form theory, and the methodology of design</li> <li>• Advanced training in visual, perception and imaginative skills</li> <li>• Comprehensive experience in dealing with methods and means of design and the transformation of the abstract into concrete form</li> <li>• Acquiring a broad range of skills of expression and visual representation in various media for the development and communication of architectural design ideas</li> <li>• Further development of own approaches and means of expression</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Advanced theoretical knowledge about the fundamentals of perception, aesthetics, form theory, methodology</li> <li>• Further application and research of existing and personal design methods</li> <li>• Experiments and conceptual considerations on the formulation of qualities of space</li> <li>• Advanced fundamental visual representation and communication techniques in the field of analog and digital drawing, freehand drawing, perspective, descriptive geometry, the basics of digital graphics processing (layout/typography/image processing), and modelling</li> <li>• Further exploration of questions of visual and three-dimensional design with regard to meaningfulness, appearance, and impact potential</li> </ul>
Credit Points	4 CP
Module	Design Basics and Visual Representation 2

<b>Course Title</b>	<b>CAAD 2</b>
Course Title (German)	CAAD 2
Language of Instruction	German
Recommended Semester(s)	2
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Extended basic knowledge about digital modelling and visualization in the design process</li> <li>• Ability to visually represent more complex architectural designs in 3D (space, object) and 2D (drawing)</li> <li>• Understanding the differences between CAD and object-oriented modelling and their use</li> <li>• Acquisition of advanced modes of expression and visual representation skills in dealing with CAAD</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Extended knowledge of CAD, focus on representation techniques and cooperation</li> <li>• Difference between CAD and object-oriented modelling</li> <li>• Advanced visual representation of space/object in 3D (real-time visualization) and in drawings (CAD)</li> <li>• Learning to use typical software for this purpose</li> </ul>
Credit Points	2 CP
Module	Design Basics and Visual Representation 2

<b>Module Title</b>	<b>Elective Module 2</b>
Module Title (German)	Wahlpflichtmodul 2
Code	1250
Language of In- struction	German / English
Recommended Semester(s)	2
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>Broadening and deepening specialist knowledge and instrumental, sys- temic, and communicative skills, according to inclination and interests</p> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	2 CP
Module Courses	See Elective Modules



<b>Course Title</b>	<b>See Elective Modules</b>
Course Title (German)	Siehe Wahlpflichtangebot
Language of Instruction	German
Recommended Semester(s)	2
Course offered in	Every semester
Competencies/Learning Objectives	The course contributes to the learning outcomes of the module by developing the given topics/contents
Topics/Course Contents	
Credit Points	2 CP
Module	Elective Module 2

<b>Module Title</b>	<b>Design Studio C: Volume and Structure</b>
Module Title (German)	Projekt C: Raum und Konstruktion
Code	1300
Language of Instruction	German
Recom- mended Se- mester(s)	3
Module offe- red in	Every semester
Competen- cies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>The module is the basis for:</p> <ul style="list-style-type: none"> <li>• Understanding structural and constructional solutions in connection with building design</li> <li>• Adequate knowledge of the basic physical conditions and technologies associated with the function of a building, the creation of comfort and protection against the effects of the weather</li> <li>• The ability to apply this knowledge in design and project work</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	10 CP
Module Cour- ses	Design Studio C: Volume and Structure Integration: Building Design Theory

<b>Course Title</b>	<b>Design Studio C: Volume and Structure</b>
Course Title (German)	Projektarbeit C
Language of In- struction	German
Recommended Semester(s)	3
Course offered in	Every semester
Competen- cies/Learning Objectives	<ul style="list-style-type: none"> <li>• Students can grasp a constructional topic, put it into context and translate it into a functional or architectural concept.</li> <li>• In addition, they are able to constructively examine spatial design ideas, to determine the building materials and to present and implement the technical design possibilities.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• The design focuses on timber construction. Essential parts of the building are to be designed using this renewable building material.</li> <li>• The design-appropriate construction (skeleton construction, stack plank or frame construction or, where applicable, composite construction) as well as the meaningful use of the extensive product range of timber construction is an integral part of the design practice.</li> </ul>
Credit Points	8 CP
Module	Design Studio C: Volume and Structure

<b>Course Title</b>	<b>Integration: Construction</b>
Course Title (German)	Integration: Konstruktion
Language of Instruction	German
Recommended Semester(s)	3
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>The module provides appropriate knowledge of constructional planning and design, planning in general and planning techniques.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>The course introduces the principles of constructional building and shows that the implementation of a design idea, of the design concept and the architectural concept is realized through their constructional transformation.</li> <li>Construction is the verification of the design concept with technical, mechanical, or industrial means, the determination of the building materials and of the production, assembly and transport technology and the economics.</li> </ul>
Credit Points	2 CP
Module	Design Studio C: Volume and Structure

<b>Module Title</b>	<b>Basics and Theory 3</b>
Module Title (German)	Grundlagen und Theorie 3
Code	1310
Language of Instruction	German
Recommended Semester(s)	3
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>The module forms the basis for</p> <ul style="list-style-type: none"> <li>• Adequate knowledge of urban planning and design</li> <li>• Knowledge of methodological and technical instruments for urban planning</li> </ul> <p>Based on the experiences of module B 210, students acquire additional knowledge about the entire spectrum of historical buildings and their urban planning context. Students acquire specialist and key skills to evaluate existing historical architecture and the history of urban development.</p> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Courses	Urban Design 1 Architectural History 2 Architectural Theory 2

<b>Course Title</b>	<b>Urban Design 1</b>
Course Title (German)	Städtebau 1
Language of Instruction	German
Recommended Semester(s)	2
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Students master the basics of urban planning and methodological and technical instruments and are familiar with the fields of activity of urban planning and urban design.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Development planning and structural planning, forms of urban constellation</li> <li>• Design of public space, micro areas and living environment, future tasks: city and globalization</li> <li>• Changes of theories and tasks in urban planning</li> <li>• Planning and moderation processes, techniques for visual representation and presentation of plans as well as communication</li> </ul>
Credit Points	2 CP
Module	Basics and Theory 3

<b>Course Title</b>	<b>Architectural History 2</b>
Course Title (German)	Baugeschichte 2
Language of Instruction	German
Recommended Semester(s)	<b>2</b>
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Knowledge of European architecture and its builders in the context of the respective conditions of the time; history of urban construction; spatial and form theory</li> <li>• Determination of essential architectural terms, knowledge of the most significant construction forms, learning the method of historical - critical work</li> <li>• Embedding historical buildings and cities in their current and historical context</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Review of the entire historical spectrum from the periods of baroque, classicism, historicism to modernism and post-war modernism</li> <li>• Includes important examples of 19th and 20th century architecture. Categorization in the context of the historical and biographical conditions of the time</li> </ul>
Credit Points	2 CP
Module	Basics and Theory 3

<b>Course Title</b>	<b>Architectural Theory 2</b>
Course Title (German)	Architekturtheorie 2
Language of Instruction	German
Recommended Semester(s)	2
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• In-depth analysis of theoretical aspects of architecture</li> <li>• Acquisition of analytical skills and reflection on "what it is that we do"</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Discourse on the theory of architectural space</li> <li>• Excursus into human perception systems and sociological production of space</li> </ul>
Credit Points	2 CP
Module	Basics and Theory 3



<b>Module Title</b>	<b>Building Technologies 2</b>
Module Title (German)	Bautechnik 2
Code	1320
Language of Instruction	German
Recom- mended Se- mester(s)	3
Module offe- red in	Every semester
Competen- cies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>The module provides advanced basics for:</p> <ul style="list-style-type: none"> <li>• Understanding the structural and constructional problems associated with building design</li> <li>• Further fundamental knowledge of the physical problems and technologies associated with the function of a building, the creation of comfort and protection against the effects of the weather</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Cour- ses	Building Construction 1 Structural Design 2

<b>Course Title</b>	<b>Building Construction 1</b>
Course Title (German)	Baukonstruktion 1
Language of In- struction	German
Recommended Semester(s)	3
Course offered in	Every semester
Competen- cies/Learning Objectives	<ul style="list-style-type: none"> <li>• Basic knowledge of skeletal construction</li> <li>• Deeper understanding of the dismantling of structural design</li> <li>• Shell and technical construction</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• The beginning of this analysis is limited to the building material wood. Like no other material, wood demonstrates the connection between characteristics and construction and, with its inner structure, can be used as a natural building material in a wide variety of ways.</li> <li>• The predominantly linear processing of wood encourages simplicity and clarity. Traditional artisanal joints and "engineering" constructions are shown</li> <li>• Further knowledge is imparted on the principles of load-bearing and construction systems, the necessary dismantling of the shell and the technical construction.</li> </ul>
Credit Points	4 CP
Module	Building Technologies 2

<b>Course Title</b>	<b>Structural Design 2</b>
Course Title (German)	Tragwerkslehre 2
Language of Instruction	German
Recommended Semester(s)	3
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>Based on Structural Design 1, the students acquire knowledge of the fundamental criteria of structural design and shell construction, with the aim of understanding and developing simple structures.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>Structural design and shell construction</li> <li>Advanced knowledge of: loads, forces, torques, force tracking in the building, equilibrium of forces, materials, force tracking in detail</li> <li>New content: stress, strain, deformation, proofs, statically indeterminate systems, stability</li> </ul>
Credit Points	2 CP
Module	Building Technologies 2

<b>Module Title</b>	<b>Design Basics and Visual Representation 3</b>
Module Title (German)	Gestaltung und Darstellung 3
Code	1340
Language of Instruction	German
Recommended Semester(s)	3
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <ul style="list-style-type: none"> <li>• Understanding, evaluating, and applying current trends in digital design for architectural design</li> <li>• Optimization of architectural designs through the use of digital methods and tools</li> <li>• Introduction to and basic application of generative systems</li> <li>• Basic digital manufacturing techniques</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Courses	Digital Design

<b>Course Title</b>	<b>Digital Design</b>
Course Title (German)	Digitales Gestalten
Language of Instruction	German
Recommended Semester(s)	3
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Understanding, evaluating, and applying current trends in digital design for architectural design</li> <li>• Knowledge of the possibilities to optimize and design individual components, elements and entire buildings using digital media / simulation</li> <li>• Evaluation of the possibilities of digital design in relation to analog design</li> <li>• Knowledge of the use and possibilities of digital manufacturing</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Commonalities and differences between classical and digital design</li> <li>• Parametric design versus direct modeling, geometry, and parametric rules</li> <li>• Aesthetic aspects of parametric design and digital optimization</li> <li>• Learning to use typical software for this purpose</li> </ul>
Credit Points	6 CP
Module	Design Basics and Visual Representation 3

<b>Module Title</b>	<b>Elective Module 3</b>
Module Title (German)	Wahlpflichtmodul 3
Code	1350
Language of In- struction	German / English
Recommended Semester(s)	3
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>Broadening and deepening specialist knowledge and instrumental, sys- temic, and communicative skills, according to inclination and interests</p> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	2 CP
Module Courses	See Elective Modules

<b>Course Title</b>	<b>See Elective Modules</b>
Course Title (German)	Siehe Wahlpflichtangebot
Language of Instruction	German
Recommended Semester(s)	3
Course offered in	Every semester
Competencies/Learning Objectives	The course contributes to the learning outcomes of the module by developing the given topics/contents
Topics/Course Contents	
Credit Points	2 CP
Module	Elective Module 3

<b>Module Title</b>	<b>Design Studio D: The City and the Urban Realm</b>
Module Title (German)	Projekt D: Stadt und Raum
Code	1400
Language of Instruction	German
Recommended Semester(s)	4
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <ul style="list-style-type: none"> <li>• The methodical application of the processes of design, urban planning design, constructional implementation and their transformation into structure and structural design are fully integrated in the module.</li> <li>• The prospective architects acquire the competence to work in an interdisciplinary manner.</li> <li>• On the basis of the architecture of the individual object, the students can recognize the complex interrelationships between the social, man-made and economic environment on an urban planning scale and translate the knowledge gained into their own designs</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b> The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	10 CP
Module Courses	Design Studio C: Volume and Structure Integration: Building Design Theory



<b>Course Title</b>	<b>Design Studio D: The City and the Urban Realm</b>
Course Title (German)	Projektarbeit D
Language of In- struction	German
Recommended Semester(s)	4
Course offered in	Every semester
Competen- cies/Learning Objectives	<ul style="list-style-type: none"> <li>On the basis of the architecture of the individual object, the students can recognize the complex interrelationships between the social, man-made and economic environment on an urban planning scale and methodically translate the knowledge gained into their own designs while working in an interdisciplinary manner.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>Development of a design concept in an urban planning context with preliminary analysis of the existing situation and identification of the development potential for urban districts through planning intervention</li> </ul>
Credit Points	8 CP
Module	Design Studio D: The City and the Urban Realm

<b>Course Title</b>	<b>Integration: Urban Design and Energy Design</b>
Course Title (German)	Integration: Städtebau und Energie
Language of Instruction	German
Recommended Semester(s)	4
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Advanced theoretical knowledge of urban planning</li> <li>• Ability to integrate this knowledge into project designs</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Urban planning strategies for planning and design</li> <li>• Planning techniques and planning procedures</li> </ul>
Credit Points	2 CP
Module	Design Studio D: The City and the Urban Realm

<b>Module Title</b>	<b>Basics and Theory 4</b>
Module Title (German)	Grundlagen und Theorie 4
Code	1410
Language of Instruction	German
Recommended Semester(s)	4
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>Based on the experience gained in modules B 210 and B 310, the students acquire specialist and key competences to evaluate and compile dimensional records and documentation of existing historical architecture, taking into account aspects of heritage conservation.</p> <ul style="list-style-type: none"> <li>• The module forms the basis for</li> <li>• Evaluation of existing building structure in order to develop necessary measures</li> <li>• Preparation of planning bases</li> <li>• Identification of the planning measures at the beginning of a project</li> </ul> <p>The module links the theoretical approaches and structural topics of urban planning and public space in more depth.</p> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Courses	Urban Design 2 Building Research

<b>Course Title</b>	<b>Urban Design 2</b>
Course Title (German)	Städtebau 2
Language of Instruction	German
Recommended Semester(s)	4
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Understanding the interrelationships between building structure and spatial structure</li> <li>• Knowledge of urban planning strategies and methodological-technical instruments of urban planning and urban development</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• The city as a process - discourse of urban theories and concepts based on important texts on architectural theory</li> <li>• Comparison of fundamental theoretical approaches and concepts such as Rogers' "functional city", Lynch's "living city" and Rossi's "architectural city"</li> </ul>
Credit Points	2 CP
Module	Basics and Theory 4

<b>Course Title</b>	<b>Building Research</b>
Course Title (German)	Bauforschung
Language of Instruction	German
Recommended Semester(s)	4
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Determination of specific building information as a planning basis for construction measures, revitalization and building evaluations</li> <li>• Knowledge of the basics of building surveying</li> <li>• Analysis of existing building structure in relation to structure, form, construction, and state of preservation</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Preparatory lectures on the basics of building documentation, field trip to and on-site work at a building</li> <li>• Production of plan materials in horizontal and vertical image planes as a manual building survey as well as a CAD drawing</li> <li>• Building survey, preparation of a room data sheet, damage mapping, building specification</li> <li>• Dimensional records and graphic documentation</li> </ul>
Credit Points	4 CP
Module	Basics and Theory 4

<b>Module Title</b>	<b>Building Technologies 3</b>
Module Title (German)	Bautechnik 3
Code	1420
Language of In- struction	German
Recommended Semester(s)	4
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>The module provides advanced basics for:</p> <ul style="list-style-type: none"> <li>• Understanding the structural and constructional problems associated with building design</li> <li>• The application of architectural strategies, principles of building physics and building technology systems for the targeted control of indoor climate conditions in buildings</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	12 CP
Module Courses	Structural Design 3 Climate Design Building Construction 2

<b>Course Title</b>	<b>Structural Design 3</b>
Course Title (German)	Tragwerkslehre 3
Language of Instruction	German
Recommended Semester(s)	4
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• The students are familiar with the basic criteria of structural design and shell construction.</li> <li>• They have an in-depth understanding of structures and can develop them.</li> </ul>
Topics/Course Contents	Structural design and shell construction: <ul style="list-style-type: none"> <li>• Further knowledge of: force tracing in the building, stress, strain, deformation, proofs, statically indeterminate systems, stability</li> <li>• New content: shells, cable structures, building dynamics, foundation, shoring, special materials</li> </ul>
Credit Points	4 CP
Module	Building Technologies 3

<b>Course Title</b>	<b>Climate Design</b>
Course Title (German)	Raumklima
Language of Instruction	German
Recommended Semester(s)	4
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• The students understand the direct dependency of people's well-being in interiors on room climate, radiation situation, air quality and light properties.</li> <li>• The students acquire the ability to recognize these parameters as tools of architectural design and to consciously implement them.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• The interaction of passive and active strategies for the targeted control of room climate conditions on the basis of human comfort requirements and climatic factors</li> <li>• In this context, the necessary basics of building technology and thermal building physics will be discussed.</li> </ul>
Credit Points	4 CP
Module	Building Technologies 3



<b>Course Title</b>	<b>Building Construction 2</b>
Course Title (German)	Baukonstruktion 2
Language of Instruction	German
Recommended Semester(s)	4
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• The students acquire the ability to understand advanced criteria of building construction with a focus on solid constructions.</li> <li>• They understand the complex interaction of special structural and material construction techniques and how components are jointed in solid construction.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Advanced knowledge of building construction, in particular further topics of solid construction such as ferroconcrete skeleton construction, shell constructions of perforated facades, extension of solid constructions and earthworks.</li> </ul>
Credit Points	4 CP
Module	Building Technologies 3

<b>Module Title</b>	<b>Elective Module 4</b>
Module Title (German)	Wahlpflichtmodul 4
Code	1450
Language of In- struction	German / English
Recommended Semester(s)	4
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>Broadening and deepening specialist knowledge and instrumental, sys- temic, and communicative skills, according to inclination and interests</p> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	2 CP
Module Courses	See Elective Modules

<b>Course Title</b>	<b>See Elective Modules</b>
Course Title (German)	Siehe Wahlpflichtangebot
Language of Instruction	German
Recommended Semester(s)	4
Course offered in	Every semester
Competencies/Learning Objectives	The course contributes to the learning outcomes of the module by developing the given topics/contents
Topics/Course Contents	
Credit Points	2 CP
Module	Elective Module 4

<b>Module Title</b>	<b>Internship</b>
Module Title (German)	Praxissemester
Code	1500
Language of In- struction	German
Recommended Semester(s)	5
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <ul style="list-style-type: none"> <li>• In this supervised internship, students will evaluate and deepen in practice the experience and knowledge gained so far during their studies.</li> <li>• The internship can be done in a planning office (architectural or engineering office), a public authority or a construction company with a planning department.</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	22 CP
Module Courses	Internship

<b>Course Title</b>	<b>Internship</b>
Course Title (German)	Berufspraktische Tätigkeit (BPT)
Language of Instruction	German
Recommended Semester(s)	5
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Learning through observation and participation in the fields of planning, execution, monitoring</li> <li>• Putting theory into practice; reflection on practice</li> <li>• Practical application of theoretical knowledge about planning, construction, execution, and monitoring</li> <li>• Active participation in planning and implementation phases in the planning office and on the construction site</li> <li>• Participation as an observer in coordination tasks between clients, contractors, authorities, and all parties involved in the planning process</li> </ul>
Topics/Course Contents	<p>Internship activities should be in one or more of the following areas (list not exhaustive):</p> <ul style="list-style-type: none"> <li>• Factory planning</li> <li>• Invitation to tender and award of contract</li> <li>• Construction management (quality control on site, company coordination etc.)</li> <li>• Invoicing of construction services</li> <li>• Participation in planning and construction meetings</li> <li>• Participation in architectural competitions or similar procedures</li> <li>• Model making and visualization</li> </ul>
Credit Points	22 CP
Module	Internship

<b>Module Title</b>	<b>Construction Management 1</b>
Module Title (German)	Baumanagement 1
Code	1530
Language of Instruction	German
Recommended Semester(s)	5
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <ul style="list-style-type: none"> <li>• The module serves as preparation for the internship, by means of block seminars at the beginning of the semester and a final report on the completed internship with critical reflection.</li> <li>• The seminar papers on the internship, which are presented to the members of the university, provide a broad exchange of experience on possible areas of employment in later professional activities as well as on organizational forms of planning offices and projects.</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Courses	Internship Preparation and Monitoring

<b>Course Title</b>	<b>Internship Preparation and Monitoring</b>
Course Title (German)	Vorbereitung und Begleitung Praxissemester
Language of Instruction	German
Recommended Semester(s)	5
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Preparation for the internship and final report with critical reflection.</li> </ul>
Topics/Course Contents	<p>Project organization (interaction between architect, client, architectural planner, authorities), processes (planning and approval procedures), possible contractual constellations and the essential rules and regulations are explained as preparation for beginning and navigating the internship.</p> <p>The final seminar paper on the completed internship should present:</p> <ul style="list-style-type: none"> <li>• Activities during the internship, in which project, in which phase?</li> <li>• Criteria for selecting the internship position?</li> <li>• Which experience was particularly important? What was particularly good?</li> <li>• What tasks were learned?</li> <li>• How was the employer organized?</li> <li>• What was of interest before the internship? What after the internship?</li> </ul>
Credit Points	6 CP
Module	Internship

<b>Module Title</b>	<b>Elective Module 5</b>
Module Title (German)	Wahlpflichtmodul 5
Code	1550
Language of In- struction	German / English
Recommended Semester(s)	5
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>Broadening and deepening specialist knowledge and instrumental, sys- temic, and communicative skills, according to inclination and interests</p> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	2 CP
Module Courses	See Elective Modules



<b>Course Title</b>	<b>See Elective Modules</b>
Course Title (German)	Siehe Wahlpflichtangebot
Language of Instruction	German
Recommended Semester(s)	5
Course offered in	Every semester
Competencies/Learning Objectives	The course contributes to the learning outcomes of the module by developing the given topics/contents
Topics/Course Contents	
Credit Points	2 CP
Module	Elective Module 5

<b>Module Title</b>	<b>Design Studio E: Building and Program</b>
Module Title (German)	Projekt E: Gebäude und Programm
Code	1600
Language of Instruction	German
Recom- mended Se- mester(s)	6
Module offe- red in	Every semester
Competen- cies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>The experiences made in the project modules B-100, B-200, B-300 and B-400 are consolidated by means of a design project. The students have mastered the complexity of space allocation as well as the integrated development of the following focal points:</p> <ul style="list-style-type: none"> <li>• Interior design</li> <li>• Building facade</li> </ul> <p>In addition, the following social skills will be consolidated:</p> <ul style="list-style-type: none"> <li>• Ability to work in a team, cooperation, and communication skills</li> <li>• Personal responsibility, ability to compromise, ability to give and accept criticism</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	10 CP
Module	Design Studio E: Building and Program
Courses	Integration: Building Design Theory

<b>Course Title</b>	<b>Design Studio E: Building and Program</b>
Course Title (German)	Projektarbeit E
Language of In- struction	German
Recommended Semester(s)	6
Course offered in	Every semester
Competen- cies/Learning Objectives	<ul style="list-style-type: none"> <li>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.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>Project E completes the design projects prior to the bachelor's thesis.</li> <li>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.</li> </ul>
Credit Points	8 CP
Module	Design Studio E: Building and Program

<b>Course Title</b>	<b>Integration: Interior Design / Building Envelope</b>
Course Title (German)	Integration: Innenraum und Hülle
Language of Instruction	German
Recommended Semester(s)	6
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Advanced theoretical knowledge of the topics interior design and building envelope</li> <li>• Ability to integrate this knowledge into project designs</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Project-related and specific contents on the main topics of interior design and building envelope</li> </ul>
Credit Points	2 CP
Module	Design Studio E: Building and Program

<b>Module Title</b>	<b>Building Technologies 4</b>
Module Title (German)	Bautechnik 4
Code	1620
Language of Instruction	German
Recommended Semester(s)	6
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>The module imparts:</p> <ul style="list-style-type: none"> <li>• The ability to design architecture that meets both aesthetic and technical requirements</li> <li>• Understanding of the structural and constructional problems associated with building design</li> <li>• Advanced knowledge of the required building systems and building technologies</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Courses	Building Envelope Interior, Material, Light

<b>Course Title</b>	<b>Building Envelope</b>
Course Title (German)	Hüllenkonstruktionen
Language of Instruction	German
Recommended Semester(s)	6
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Students learn the basics of designing and constructing with modular building systems based on the building envelope and apply them.</li> <li>• They acquire the ability to work with systems and to integrate the complex requirements between the conflicting demands of design goals, implementation strategies and technical possibilities into a design concept.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Basic knowledge of current building envelope systems, their functions and requirements, with a focus on industrial systems</li> </ul>
Credit Points	4 CP
Module	Building Technologies 4

<b>Course Title</b>	<b>Interior, Material, Light</b>
Course Title (German)	Innenraum, Material, Licht
Language of Instruction	German
Recommended Semester(s)	6
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>By working with different types of rooms (working, learning, living and sacred spaces...) students become familiar with their technical and atmospheric requirements and can work on coherent color, material, and lighting concepts.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>The subject deals with spatial differentiation, spatial connections, the integration of technical elements as well as the interaction of material, color, structure, texture, and light.</li> </ul>
Credit Points	2 CP
Module	Building Technologies 4

<b>Module Title</b>	<b>Building Technologies 5</b>
Module Title (German)	Bautechnik 5
Code	1630
Language of In- struction	German
Recommended Semester(s)	6
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>The module provides in-depth knowledge for:</p> <ul style="list-style-type: none"> <li>• The application of architectural strategies, building physics principles and technical building systems for the targeted optimization of the energy requirements of buildings</li> <li>• The application of architectural strategies, building physics principles and construction systems for the targeted control of acoustic conditions in buildings</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Courses	Energy Design Acoustics



<b>Course Title</b>	<b>Energy Design</b>
Course Title (German)	Energieeffizientes Bauen
Language of In- struction	German
Recommended Semester(s)	6
Course offered in	Every semester
Competen- cies/Learning Objectives	<ul style="list-style-type: none"> <li>• The students understand that the energy requirements of buildings are iteratively dependent on the passive strategies of the design on the one hand and the implemented active components of building technology on the other.</li> <li>• The students will be enabled to recognize these complex system interrelationships and to strategically apply the different parameters with the aim of creating an energy-efficient and resource-saving overall system.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Within a discussion of a broad concept of sustainability, the different systems of energy supply and resource consumption in the production and operation of buildings are critically analyzed and, taking into account human comfort requirements and climatic factors, placed in the context of architectural design.</li> <li>• The course also deals with the fundamentals of building technology and thermal building physics.</li> </ul>
Credit Points	4 CP
Module	Building Technologies 5

<b>Course Title</b>	<b>Acoustics</b>
Course Title (German)	Raumakustik
Language of In- struction	German
Recommended Semester(s)	6
Course offered in	Every semester
Competen- cies/Learning Objectives	<ul style="list-style-type: none"> <li>• In order to enter into a dialogue with the architectural planner, the students have basic knowledge of acoustics, which enables them to create a design that already contains possible solutions for the creation of good acoustic conditions.</li> <li>• They are able to deal with the subject of sound insulation and its problems in planning and execution and to solve the problems in simple cases.</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• In addition to fundamentals of acoustics and interdependencies with building physics, the theoretical topics are illustrated and made "audible" in practical demonstrations in a fully equipped laboratory with standard-compliant test facilities.</li> <li>• The course deals with building inspection requirements according to DIN 4109 "Noise protection in building constructions", standard-compliant measuring procedures for determining the sound reduction index and standardized impact sound pressure level, the development of the most important acoustic parameters and their measurement as well as the regular reference to building practice.</li> <li>• This is particularly important in order to teach the students about practical feasibility and thus promote their awareness of the subjects of sound insulation and acoustics during the design and planning phase.</li> </ul>
Credit Points	2 CP
Module	Building Technologies 5

<b>Module Title</b>	<b>Construction Management 2</b>
Module Title (German)	Baumanagement 2
Code	1640
Language of Instruction	German
Recommended Semester(s)	6
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <ul style="list-style-type: none"> <li>The module provides knowledge of the production process on the construction site, its regulations, and the tasks of the architect during tendering and construction management, including quality control, scheduling, and coordination as well as invoicing.</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Courses	Construction Management

<b>Course Title</b>	<b>Construction Management</b>
Course Title (German)	Baumanagement
Language of Instruction	German
Recommended Semester(s)	6
Course offered in	Every semester
Competencies/Learning Objectives	<ul style="list-style-type: none"> <li>• Knowledge of the production process on construction sites as well as work preparation and supervision on construction sites</li> <li>• Knowledge of crafts, their rules and standards and the procedure on building sites as a prerequisite for tasks in construction management, both generally for economic planning and construction</li> </ul>
Topics/Course Contents	<ul style="list-style-type: none"> <li>• Explanation of structure/contents of official contracting terms for the award of construction performance contracts (<i>VOB/C = Verdingungsverordnung für die Vergabe von Bauleistungen</i>)</li> <li>• Overview of crafts</li> <li>• Planning a construction site - necessary information and sources, planning of construction site equipment/work preparation</li> <li>• Earthworks/foundation engineering/demolition of buildings/recycling of building materials</li> <li>• Formwork and scaffolding/concrete production and processing</li> <li>• Finishing crafts</li> <li>• Practical examples are used to illustrate how the choice of materials and design principles affect construction processes, construction site logistics and the cost and schedule situation (when must planning be completed?).</li> </ul>
Credit Points	6 CP
Module	Construction Management 2

<b>Module Title</b>	<b>Elective Module 6</b>
Module Title (German)	Wahlpflichtmodul 6
Code	1650
Language of In- struction	German / English
Recommended Semester(s)	6
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <p>Broadening and deepening specialist knowledge and instrumental, sys- temic, and communicative skills, according to inclination and interests</p> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	2 CP
Module Courses	See Elective Modules

<b>Course Title</b>	<b>See Elective Modules</b>
Course Title (German)	Siehe Wahlpflichtangebot
Language of Instruction	German
Recommended Semester(s)	6
Course offered in	Every semester
Competencies/Learning Objectives	The course contributes to the learning outcomes of the module by developing the given topics/contents
Topics/Course Contents	
Credit Points	2 CP
Module	Elective Module 6

<b>Module Title</b>	<b>Ad Hoc</b>
Module Title (German)	Stegreif
Code	1700
Language of In- struction	German
Recommended Semester(s)	7
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <ul style="list-style-type: none"> <li>• The students exercise sound judgement and are able to make quick decisions when making the design concept.</li> <li>• They are able to reduce problems to the essential points and recognize insignificant things as such.</li> <li>• The formal repertoire of the students is constantly reviewed and expanded due to the wide variety of different tasks during their studies.</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Courses	

<b>Module Title</b>	<b>Bachelor's Thesis</b>
Module Title (German)	Bachelorthesis
Code	9050
Language of In- struction	German / English
Recommended Semester(s)	7
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <ul style="list-style-type: none"> <li>• The bachelor's thesis is the examination paper that concludes the bachelor's degree.</li> <li>• 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.</li> <li>• Solution of a project task in the fields of urban planning, building construction or a written concept in the field of construction management</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	12 CP
Module Courses	Bachelor's Thesis



<b>Course Title</b>	<b>Bachelor's Thesis</b>
Course Title (German)	Bachelor-Arbeit
Language of Instruction	German / English
Recommended Semester(s)	7
Course offered in	Every semester
Competencies/Learning Objectives	The course contributes to the learning outcomes of the module by developing the given topics/contents
Topics/Course Contents	
Credit Points	12 CP
Module	Elective Module 6

<b>Module Title</b>	<b>Colloquium</b>
Module Title (German)	Kolloquium
Code	9050
Language of Instruction	German / English
Recom- mended Se- mester(s)	7
Module offe- red in	Every semester
Competen- cies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <ul style="list-style-type: none"> <li>The students show that they are able to support the results developed in module B-700 in a given period of time as part of an expert discussion which is open to all members of the university.</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Courses	

<b>Module Title</b>	<b>Theoretical Seminar</b>
Module Title (German)	Begleitseminar
Code	9050
Language of In- struction	German / English
Recommended Semester(s)	7
Module offered in	Every semester
Competencies	<p><b>Subject-specific and methodological competencies and skills (Knowledge and understanding as well as applying and generating knowledge)</b></p> <ul style="list-style-type: none"> <li>• The students have acquired project-related and specific knowledge of the main topics of the assigned task of the bachelor's thesis.</li> <li>• They have advanced skills in scientific work and can apply them during the preparation of the bachelor's thesis.</li> <li>• They can graphically display and present the acquired knowledge to other experts.</li> </ul> <p><b>Other competencies and skills (Communication and cooperation)</b></p> <p>The acquisition of other competencies and skills is integrated into the module</p>
Credit Points	6 CP
Module Courses	