



Module Manual

Master Degree Programme in Architecture (Master of Arts)

**Department of Architecture
University of Applied Sciences
Wilhelmshaven / Elsfleth/ Oldenburg**

**Faculty of Architecture
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Project I - Design and Detail Design

Lecturer responsible:		Module code:	MA P.1
Offered in the degree programme:	Architecture, MA	Offered in semester:	2
CP:	12	No. of participants:	21
Weekly semester hours	8	Language of instruction:	German
Examination:	Design		

Student working hours:	210 hours of self-study, 90 hours of lectures and practical seminar supervision
Course form:	Lectures, supervised practical seminars and free work

Competence goals:

When students have completed the module, they can

- coordinate and assess the varied, complex requirements to be fulfilled by a project design in the design and construction process and implement these in a suitable design concept,
- concretise their design concept through to the details,
- recognise the mutual influences of these different requirements in the design and construction process
 - with the emphasis on the links between design and construction,
- effectively employ presentation techniques such as models, drawings, sketches, CAD, text and oral presentations.

Description of the course content:

A building assignment with complex utilisation requirements in a problematic urban design/landscape context is set. It can be either a new build or the conversion of an existing building. The emphasis is on the formulation of a suitable design concept and its implementation in a suitable, self-explanatory construction.

The structural detail must be examined and adapted with regard to the technical accuracy as well as its compatibility with the previously formulated design concept. During its preparation there are no time limits for the individual steps "concept-design-structure-detail", but a mutually influencing, complex process should be aimed for.

The design must be presented with suitable means: Model, drawing, sketch, text.

The project design phase is supervised with intensive project correction sessions. Necessary content is conveyed in supplementary, ancillary lectures. The results are then presented and defended by the students at a subsequent event. The presentation of the results at the end of the semester is compulsory and will be evaluated.

Project II - Sustainable Project Design

Lecturer responsible:		Module code:	MA P.2
Offered in the degree programme:	Architecture, MA	Offered in semester:	1
CP:	12	No. of participants:	21
Weekly semester hours	12	Language of instruction:	German
Examination:	Design		

Student working hours:	165 hours of self-study, 135 hours of lectures and practical seminar supervision
Course form:	Lectures, supervised practical seminars and free work

Competence goals:

When students have completed the module, they can

- name the ecological, economic and socio-cultural decision criteria that are of significance for the entire life cycle of a building, from the procurement of the raw materials through to the erection and use and ultimately demolition,
- recognise correlations between design, energy optimisation, building technology and economy,
- examine the economy of a design in the creation phase by determining various parameters,
- apply the various costing methods,
- develop sustainable building concepts with the previously described decision criteria,
- Effectively employ presentation techniques such as models, drawings, CAD, sketches, texts and oral presentations.

Description of the course content:

The project includes a design assignment. This can be either a new build or the conversion of an existing building. The thematic emphasis is on the field of sustainable building with simultaneous consideration of ecological, economic and socio-cultural aspects of planning (in keeping with the criteria of the German Sustainable Building Council (DGNB)).

The following design-related content is examined in more detail:

- compactness, orientation and zoning of the building
- area optimisation, usage optimisation and flexibility
- determination and of planning parameters in the early design phase (e.g. BGF/BRI, VF/NF, A/Ve)
- cost calculation in compliance with DIN
- Life Cycle Costing (LCC)
- Different amortisation calculations are used to examine building technology versions in relation to the optimisation of the building shell.
- partial, detailed examination of technological aspects of energy-saving construction

The content required for the assignment is conveyed in ancillary lectures and intensive correction sessions. The project can be supplemented by excursions, oral presentations/and or lectures by guest lecturers. The individual supervision of the design work is structured by regular intermediate presentations. The presentation of the results at the end of the semester is compulsory and will be evaluated. The project must be presented with suitable means: Drawings, models, explanatory graphics and texts.

Urban Design

Lecturer responsible:		Module code:	MA 2.1
Offered in the degree programme:	Architecture, MA	Offered in semester:	1
CP:	6	No. of participants:	21
Weekly semester hours	6	Language of instruction:	German
Examination:	Design		

Student working hours:	83 hours of self-study,
Course form:	67 hours of lectures and practical seminar supervision
	Lectures, supervised practical seminars and free work

Competence goals:

When students have completed the module, they can

- determine the urban dimensions from a planning viewpoint,
- comprehend the complexity of the problems of urban concepts,
- synthesise various parameters to create a holistic urban space design,
- effectively employ presentation techniques such as models, drawings, sketches, CAD, text and oral presentations.

Description of the course content:

The module comprises the creation of an urban design with complex existing periphery situations or problem zones of urban areas as the context. Wasteland spaces in peripheral zones, amorphous intermediate spaces in industrial urban areas, holes in the urban fabric and the partial shrinkage process are phenomena of urban environments from which the topic of the assignment is derived.

The assignment comprises the following steps: Examination and analysis of the existing situation, formulation and presentation of the intended design. Items included in the design project are an intensive discussion from typological, structural and programmatic viewpoints with principle design and functional statements on the urban space, the architecture and landscape.

In addition to site viewings, mentoring and assessment in individual or group meetings, the necessary content is conveyed in assignment-related lectures. The results are then presented and defended by the students at a subsequent presentation (if necessary with the involvement of external experts). The presentation of the results at the end of the semester is compulsory and will be evaluated. The design must be presented with suitable means: Drawings text and model.

Landscape Design

Lecturer responsible:		Module code:	MA 2.2
Offered in the degree programme:	Architecture, MA	Offered in semester:	2
CP:	10	No. of participants:	21
Weekly semester hours	9	Language of instruction:	German
Examination:	Design and term paper		

Student working hours:	149 hours of self-study,
Course form:	101 hours of lectures and practical seminar supervision
	Lectures, supervised practical seminars and free work

Competence goals:

When students have completed the module, they can

- name the basic elements of green area and landscape design,
- work with the basic elements of landscape design,
- use methods for the design and composition of landscapes,
- deal with landscapes in a differentiated manner,
- compile scientific texts,
- effectively employ presentation techniques such as drawings, sketches, CAD, text and oral presentations.

Description of the course content:

Lectures introduce students to the various fields of the assignment, the significance and characteristics of green areas and landscapes. The development of garden and landscape design and public spaces is described in chronologically and thematically structured order. The series of lectures focuses on the basic elements of architectural landscape design, the tools for green area and landscape design, the function, materiality, sensuality and perception of outdoor spaces. Tools, strategies and aesthetic concepts for landscape design are described in more detail by means of selected planned and implemented examples as well as the examination of landscape architecture. In addition aspects of environmental conservation and planning law aspects as well as questions of constructional design are addressed. The interfaces between artefact-nature, architecture-landscape and house-garden are taken as examples.

The basic elements of green areas and landscapes and the design of space and areas are practiced alongside instruction in theory in preliminary practical sessions with a mainly abstract orientation. The main priority is on the examination of various natural and also artificial materials and their space-creating, aesthetic and functional properties.

The preliminary practical seminars culminate in a complex landscape design with a limited scope showing problematic zones in the urban or landscape structure. One main area is emphasising the different and sometimes conflicting effect and perception of green architecture in contrast to buildings. The necessary competencies are conveyed in lectures as well as in mentoring and assessment sessions either on a one-to-one basis or in groups.

A term paper must be written in conjunction with the topics of the lecture. The design drawn up alongside the lectures is presented by the students at a final presentation. The design must be presented in drawings, text and with a model (digital/analogue).

Theory I - Urban Design Theory

Lecturer responsible:		Module code:	MA 3.1
Offered in the degree programme:	Architecture, MA	Offered in semester:	1
CP:	4	No. of participants:	42
Weekly semester hours:	3	Language of instruction:	German
Examination:	Term paper		

Student working hours:	66 hours self-study, 34 hours lectures
Course form:	Lectures and free work

Competence goals:

When students have completed the module, they can

- analyse current problems of contemporary urban developments,
- interpret urban design parameters,
- compile scientific texts,
- selectively employ presentation techniques such as images, graphics and texts.

Description of the course content:

Urban development is examined in seminars from the typological, functional, sociological and aesthetic viewpoints in relation to the changing relationships between urban and landscape environments. Terms such as urban sprawl, featureless cities and fractalisation are characteristic buzzwords in the urban design discussion, but also their existing integrative tasks and opportunities must be examined.

Explosive growth in population generates mega-cities. This is contrasted by the new problematic constellation of shrinkage resulting from decreasing populations and economic weakness.

This antagonistic development is examined in the seminar. Selected examples are used to demonstrate their settlement structural, urban cultural, economic and ecological effects and current planning approaches.

A term paper is required on the seminar topics.

Theory II – Architectural Theory

Lecturer responsible:		Module code:	MA 3.2
Offered in the degree programme:	Architecture, MA	Offered in semester:	2
CP:	4	No. of participants:	42
Weekly semester hours:	3	Language of instruction:	German
Examination:	Term paper		

Student working hours: **66 hours self-study, 34 hours lectures**

Course form: **Lectures and free work**

Competence goals:

When students have completed the module, they can

- interpret theoretical architectural parameters,
- recognise the relativity and characteristics of existing and planned architecture from theoretical standpoints,
- understand and communicate theoretical approaches as a methodical architecture description, evaluation and explanation procedure,
- compile scientific texts,
- selectively employ presentation techniques such as images, graphics and texts.

Description of the course content:

The seminar communicates the basic terms and methods of architectural theory and criticism and comprehension of various interpretation models of architecture as well as, for example, the significance of the place, space, form, function, style, meaning, material and media.

Architecture and its changing significance in society, the relationship between architecture and power, architecture and media, perception of architecture are examined. The emphasis is on examination of the 20th and 21st centuries.

A term paper is required on the seminar topics with their lectures.

Digital Presentation of Architecture

Lecturer responsible:		Module code:	MA 6.1
Offered in the degree programme:	Architecture, MA	Offered in semester:	1
CP:	6	No. of participants:	21
Weekly semester hours	4	Language of instruction:	German
Examination:	Portfolio		

Student working hours:	105 hours of self-study, 45 hours of lectures and practical seminar supervision
Course form:	Lectures, supervised practical seminars and free work

Competence goals:

When students have completed the module, they can

- use CAD programmes for specific purposes,
- apply skills and knowledge in the workflow,
- use visualisation as a design tool at an early stage,
- convey architectural content by means of experimental presentation and animation.

Description of the course content:

The Master's Degree Course includes detailed, advanced study of the applications already featured in the Bachelor's Degree Course and more detailed use of animation to ensure competent use of software. The skills in creating 3D models are trained and enhanced by working on a building that is generally of particular architectural and historical importance. The workflow and data communication between several different programmes (modelling/rendering/image processing/animation) play a special role. Restructuring the data in favour of the calculation times on the one hand and the extraction and saving of individual channels on the other is tested to obtain information on structural errors during the creation of 3D models.

Animation supplements architectural presentation by the axis of time. This enables the generation of special virtual concept worlds that can be used to facilitate effective communication between the architect and other non-specialists involved in the project.

The assignments include a small design element without this being the main focus. The examination comprises submission of a complex semester assignment comprising a 3D model, renderings (different materials, moods, seasons, light situations) as well as an animation to include the various 3D model statuses.

Elective module CC

Lecturer responsible:		Module code:	MA 7.1
Offered in the degree programme:	Architecture, MA	Offered in semester:	3
CP:	8	No. of participants:	
Course paper:	Is announced at the beginning of the semester	Language of instruction:	

Student working hours:	200 hours
Course form:	Depending on the respective module

Competence goals:

When students have completed the module, they can

- meet the competence goals of the respective elective module.

Description of the course content:

During the degree course the students must attend modules with a total of 8 CP from the course certificate elective module and conclude the module with a course certificate. A list of the possible modules is announced at the beginning of each semester.

Modules attended at other universities and faculties can also be accepted if they are conducive to the Master of Arts in Architecture programme. The Examination Board decides if these are acceptable.

Elective module E

Lecturer responsible:		Module code:	MA 7.2
Offered in the degree programme:	Architecture, MA	Offered in semester:	3
CP:	8	No. of participants:	
Examination:	Is announced at the beginning of the semester	Language of instruction:	

Student working hours:	200 hours
Course form:	Depending on the respective module

Competence goals:

When students have completed the module, they can

- meet the competence goals of the respective elective module.

Description of the course content:

During the degree course the students must attend modules with a total of 8 CP from the examination elective module and conclude the module with an examination. A list of the possible modules is announced at the beginning of each semester.

Modules attended at other universities and faculties can also be accepted if they are conducive to the Master of Arts in Architecture programme. The Examination Board decides if these are acceptable.

Independent Design Project

Lecturer responsible:		Module code:	MA 7.3
Offered in the degree programme:	Architecture, MA	Offered in semester:	3
CP:	20	No. of participants:	
Examination:	Design	Language of instruction:	

Student working hours:	490 hours of self-study, 10 hours of mentoring and assessment sessions, and a colloquium
Course form:	mentoring and assessment sessions, colloquium and free work

Independent Design Project

When students have completed the module, they can

- analyse a complex architectural problem,
- effectively structure a thematic constellation and examine this from a theoretical viewpoint,
- examine the content of their design in more detail by means of supplementary areas of focus with the aim of synthesising different design parameters to create a holistic architectural design,
- effectively employ presentation techniques such as models, drawings, sketches, CAD, text and oral presentations.

Description of the course content:

The Independent Design Project requires the interdisciplinary examination of a complex architectural situation. The examination of the urban planning or structural engineering design topic must be supplemented with one or more areas of focus from other module groups. This additional area of focus is specified as a field of specialisation.

The assignment location is in existing peripheral situations or problematic zones in inner-city areas: Wasteland spaces in peripheral zones, amorphous spaces in industrialised urban areas, holes in the urban fabric. The assignments focus on revitalisation, conversion as well as planning of new buildings.

The assignment comprises the following steps: Development of the design topic, analysis and structuring of the problem, examination and analysis of the existing situation, formulation of solutions, elaboration of a holistic solution, presentation and communication of the result.

The students evolve the project topic themselves and the main themes are discussed with the selected tutor. The design and field of specialisation are specified with their respective percentage weighting that in turn stipulates the supervision share of the respective examiner. The design percentage must be between 50 and 80.

This individual design project is accompanied by mentoring and assessment sessions. The design and the subsequent preparation must be presented in drawings, texts and models (analogue and digital). Presentation and defence of the design in a presentation that is open to all students and members of the university is a compulsory element of the assignment.

International Studies

Lecturer responsible:		Module code:	MA 7.4
Offered in the degree programme:	Architecture, MA	Offered in semester:	3
CP:	20	No. of participants:	
Examination:	External examinatio	Language of instruction:	

Student working hours:	500 hours
Course form:	Depending on the respective module

International Studies

When students have completed the module, they can

- perceive cultural differences in a differentiated manner
- reflect on their own values and standards
- communicate in international teams
- reflect on the dependence of architectural designs on cultural and institutional conditions
- handle design tasks from a cultural context that is foreign to them
- work on specific architectural projects in international teams
- meet the competence goals of the modules attended at the partner university abroad.

Description of the course content:

The students attend a university abroad for at least one semester. The examinations taken as part of the International Studies module are awarded 20 CP - in the university abroad in a comparable course of studies.

Master's Thesis

Lecturer responsible:		Module code:	MA 8.0
Offered in the degree programme:	Architecture, MA	Offered in semester:	4
CP:	30	No. of participants:	
Examination:	Design/colloquium open to students and members of the university	Language of instruction:	German

Student working hours:	750 hours of self-study, 3 hours of supervision and colloquium, concept meetings, colloquium and free work
Course form:	

Competence goals:

When students have completed the module, they can

- analyse a complex architectural problem,
- effectively structure a thematic constellation and examine this from a theoretical viewpoint,
- examine the content of their design in more detail by means of supplementary areas of focus with the aim of synthesising different design parameters to create a holistic architectural design,
- evolve and present an independent design approach to the design assignment.
- effectively employ presentation techniques such as models, drawings, sketches, CAD, text and oral presentations.

Description of the course content:

A design assignment with a high degree of complexity is set. This can focus on the conversion of an existing building or planning of a new build within a specific urban planning/landscape context. The topic must be supplemented by one or more fields of specialisation. Theoretical discussion and investigation is part of the assignment. The design must be presented in drawings, text and with a model (digital/analogue).

The Master's Thesis is published at the end of the preparation time and subsequently presented at a colloquium that is open to students and members of the university. The design and colloquium are graded with an overall mark.

Overview of modules

	Meta-module	1st semester	2nd semester	3rd semester	4th semester
MA P.	Projects	MA P.1 Project I <i>Design and Detail</i>	MA P.1 Project I <i>Sustainable Design</i>	MA 7.3 Independent Design Project or MA 7.4 International Studies	MA 8.1 Master's Thesis
	weekly semester hours / CP	8/12	12/12		
MA 2.	Urban Design and Landscape Design	MA 2.1 Urban Design	MA 2.2 Landscape Design		
	weekly semester hours / CP	6/6	9/10		
MA 3.	Theory of Design and Urban Design	MA 3.1 Theory I <i>Urban Planning Theory</i>	MA 3.1 Theory II <i>Architectural Theory</i>		
	weekly semester hours / CP	3/4	3/4	IP/20	
MA 6.	Design and Architectural Presentation	MA 6.1 Digital Architectural Presentation		MA 7.1 Elective Module CC	
	weekly semester hours / CP	4/6		Elective module/6	
MA 7. & MA 8.	Elective Module & Master's Thesis	MA 7.1 Elective Module CC	MA 7.2 Elective Module E	MA 7.2 Elective Module E	
	weekly semester hours / CP	Elective module/2	Elective module/4	Elective module/4	MA/30
	total weekly semester hours / CP	21+elective module/30	24+elective module/30	IP+elective module/30	MA/30