

Óbuda University

Ybl Miklós Faculty of  
Architecture and Civil Engineering



## **Curriculum**

### **Architect Master Course (MSc, version “F”)**

Budapest, 1/9/2023

# ARCHITECT

(MSc) MASTER COURSE

Valid curriculum („F”) from the academic year of 2023/24

**Name of the academic master programme:** Architect

**Name of the academic master programme in Hungarian:** építész

**Name of qualification:** Architect

**Name of qualification in Hungarian:** okleveles építész

**Level of qualification:** Master course (MA/MSc)

**Possible specializations**

- architectural and interior design (ArchD)

- urban design and chief architect (UrbD)

**Official length of program:** 4 semester

**Program director:** Prof. Dr. habil Gyula Kiss DLA

**Name of majors accepted as prerequisites for admission to the master's program**

- A **Bachelor's degree in Architectural Engineering** can be considered by taking into account the total credit value.

- By completing certain credits, the following can be considered: **Architecture, Civil Engineering**, and a **Bachelor's program in Settlement Engineering** according to Act LXXX (1993).

- By completing certain credits, the following can also be taken into account: those Bachelors and Masters courses, as well as courses according to Act LXXX of 1993 on higher education, which are accepted by the credit transfer committee of the higher education institution based on the comparison of the knowledge that serves as the basis for determining the credit.

**In the case of those with a degree that can be taken into account with a partial credit value, the minimum conditions for entry into the master's training cycle are:**

The condition for admission to the master's program is that the applicant has a total of at least 100 credits from previous studies, as follows, per area of knowledge:

- mathematics, representational geometry, technical representation, CAD	at least	12 credits
- economics, philosophy; sociology	at least	8 credits
- history of architecture, history of art, theory of architecture	at least	16 credits
- statics, solidity theory, supporting structures, structural design	at least	22 credits
- building structures, construction materials, building architecture, building engineering, building physics	at least	32 credits
- construction management, knowledge of construction law, construction execution, organization	at least	10 credits
- freehand drawing, pattern-modelling, spatial and colour composition	at least	20 credits
- building design (theory, practice), settlement design, complex design, diploma design	at least	50 credits

In the master's program, the credits missing from the listed fields at the time of admission must be acquired in accordance with the study and examination regulations of the higher education institution, from subjects and curricular units other than those specified in the curriculum of the program, prior to the admission of the diploma planning subject.

Admission to the master's program is also conditional on completion of at least 16 weeks of professional practice completed prior to the master's program.

**The credit requirements for entering the master's course, the specific regulations for this, ensuring the replacement of missing knowledge**

The missing credits between the BSc and college-level education are determined individually for each person by the Admissions Committee together with the responsible institute, based on the consideration of previous studies and certified professional practices, in point 4 of the Training and Exit Requirements of the MSc Program in Architecture (accepted majors as a prerequisite for entering the master's program) considering and complying with what is described. To fulfill these, the faculty offers everyone from the basic education range the opportunity to complete part-time, self-funded training. Of course, the credits prescribed by the Admissions Committee can also be completed at other higher education institutions upon prior consultation and within the framework of the accreditation. In order to obtain the required credits, the student establishes a legal student relationship with the educational institution

**Total number of credits required for the degree: 120 credits**

- the orientation of the course: 'balanced'
- final project: 26 credits
- elective subjects minimum: 6 credits

### **Disciplines and professional fields the course comprises:**

- development of creative skills, visual arts, social and natural sciences, economics, law, technical studies: **17 credits**
- mandatory professional subjects (building design, design methodology, history of architecture and cities, urban planning, statutory development control, heritage conservation, architectural theory, design of supporting structures, design of building structures, building services, building technologies, building physics and energy efficiency, environmental conscious design, fire protection, architectural presentation, colour dynamics, CAD, BIM, building materials, complex design project): **32 credits** (+ 26 credits for the final project)
- the value of specialization within the complete course: **37 credits**
- Physical Education: **2 credits**

### **The educational objectives of the master course and the professional competencies**

To train architects for the entire practice of architecture, who, due to their knowledge and skills, are capable to manage technical tasks on their own while being aware of the social and the environmental impacts of architecture. They are also enabled to continue their studies for PhD.

During the course, due attention is paid to the principles, and required knowledge and skills included in paragraph 46 of the 2005/36 EC decree by the European Parliament and the Council.

### **The system of assessment**

The study requirements and their actual forms, the system of assessment, the consequences of failing to meet the study requirements and the mode of making up for it are determined by the relevant regulations, the Study and Examination Rules of the University and the program curriculum, respectively.

Assessments of the acquired knowledge are conducted via different forms of examinations and/or continuous performance monitoring of seminars.

The system of continuous monitoring includes theoretical and practical assignments, home-works, complex semester projects, essays and final project work.

### **Foreign language requirements**

In addition to passing the criterion subject, the language criterion for obtaining the final certificate is passing the internal technical language exam. The internal technical language test is based on language proficiency at level B2 of the Common European Framework of Reference for Languages and knowledge of the professional language of training.

### **The final project**

A condition of graduation is the elaboration and the submission of the final project.

The student, through this project, demonstrates that he/she can apply the acquired knowledge in practice, can find his/her way in professional literature beyond the curriculum, able to find appropriate methods and to draw the right conclusions in dealing with academic and/or professional problems. Thus, the preparation and the presentation of the final project prove that the student is capable of solving various design problems, conducting research, and he/she can apply his/her professional knowledge in everyday practice.

The formal requirements of the final project are determined by the Faculty.

### **Preconditions of the final exam**

- Fulfilment of the obligations according to the course rules, and the collection of necessary credits; i.e. the obtainment of the 'absolatory',
- participation in the diploma preparatory juries overseen by the Institute of Architects, and using the opinions there and the consultancy opinions, to prepare the primarily design task(s) specified in the diploma announcement,
- the final project prepared and submitted by the announced deadline, which is evaluated by the committee set up by the Institute of Architects, evaluates and decides on the admission to defense.

### **The elements of the final graduation examination**

- The free-style presentation and successfully debating the critique of the final project, and
- an oral exam consisting of complex questions covering the knowledge required to obtain the diploma included in the curriculum.

### **The calculation of the final exam mark and calculation of the graduation result:**

According to the Student Requirement System of Óbuda University, Study and Examination Regulations:

$$Z = (SZD + Z1 + Z2) / 3$$

- SZD: the mark of the thesis and its defense
- Z1: grade awarded for the first part of the oral exam
- Z2: grade awarded for the second part of the oral exam

**Conditions for issuing the diploma:** successful final exam

### **Overall classification of the qualification:**

According to the Student Requirement System of Óbuda University, Study and Examination Regulations.

## **Professional competencies to acquire**

### **The Architect's**

#### **a) knowledge**

- he/she is adequately familiar with social sciences involved and the social processes that affect architecture
- familiar with the history of architecture, its main periods and outputs, and their relationships with other forms of art
- familiar with the main theories of contemporary architecture, with its dominant designers and their outstanding buildings
- understands the relationships and the interactions between man and the built and natural environments
- familiar with design principles and the steps of the process involved
- familiar with the functional, social and legal requirements of various building types
- familiar with the history of settlements and aware of the principles and means of urban development
- familiar with the various supporting and building structures, their selection, construction and calculation principles and methods, the characteristics of building materials, with special attention to standard technical requirements
- familiar with the up-to-date principles and typical solutions of energy efficient environmental design
- possesses suitable knowledge of engineering disciplines that contribute to building
- familiar with the various types of architectural presentation and documentation techniques and with their requirements; able to apply CAD and has an overview of other IT possibilities and means
- familiar with the technical, economic and legal requirements, technologies and procedures, respectively, involved in implementation, real estate development and management, respectively, including the measurement, documentation, maintenance and reconstruction of the building stock
- familiar with the principles, rules and means of heritage conservation
- aware of the profession's social obligations, including social, economic, legal, ethical and technical factors
- familiar with the principles and methods of quality control in architectural design and building, and has an overview of various quality assurance systems
- according to the specialisation chosen, he/she has a deeper knowledge in at least one sub-field of architecture

#### **b) skills**

- he/she is able to develop an appropriate architectural and/or urban planning program, according to the particular function(s), context and needs, including the compilation of the brief of requirements
- able to overview the entire design process from conceptual development, through detailed design to implementation, and able to select the most appropriate solutions (i.e. materials and layouts)
- able to comprehensively handle aesthetic, functional, technical, economic, social and legal expectations throughout the design process, and to deliver architectural designs accordingly
- able to think through the problems of supporting and building structures, building services, to develop their concepts and to apply them in practice, including the determination of their approximate space requirements
- able to use different technologies, models and various IT software in designing, building and operation
- able to efficiently take part in the preparation of urban development schemes and development control plans
- able to make estimates for possible costs, values, impacts and for the feasibility of the planned building
- able, with due diligence, to consider and to apply new products, structures and technologies
- able to sort, observe, and analyse information collected during the design, implementation and operational processes, and to conclude the lessons, including the feedback into practice
- able to distribute, share and prioritize architectural tasks; able to manage working groups and to integrate the input of other engineering fields taking part in the design process
- able to, manually as well as digitally, create architectural documentations at high standards, including the quality of graphics, according to relevant standards and regulations
- able to create real and virtual mock-ups and architectural presentations
- according to the specialization chosen, he/she possesses higher level skills at least in one sub-field

#### **c) attitudes**

- with his/her high standard and harmonic product, he/she endeavours to satisfy human needs at a human scale, and to meet aesthetic and technical requirements, too
- endeavours to solve problems with a process oriented system approach in a creative manner; able to switch between intuition and knowledge based approaches, when necessary
- endeavours, with considering ecological aspects, to develop future oriented, sustainable and energy efficient buildings
- he/she is open to the absorption of new information and endeavours to continuously improve his/her general and professional education, respectively
- he/she is an initiator who endeavours to share complex jobs with setting up working groups, while appreciating knowledge provided by fellow colleagues and experts involved
- endeavours to use architecture as a community service and is sensitive for human problems, environmental and social challenges, while appreciates traditions and the values of built and natural heritage
- endeavours to comply with regulations and ethical norms, including health at workplace, safety, technical, legal and economic requirements

#### **d) autonomy and responsibility**

- in case of professional problems, he/she initiates action on his/her own
- he/she is able to manage working groups sized to his/her experience, but also able to work as a member of a group, under supervision
- following careful considerations, including consultation with other relevant experts if necessary, he/she is able to make decisions and to take responsibility for them
- he/she is aware of his/her own personal, financial and moral responsibilities and the social impact of the built environment

#### **Further skills at the 'architecture and interior design' specialization**

- he/she possesses deeper than the average knowledge and skills in the following fields: architectural aesthetics, interior design, housing, community building design, design of special technology buildings, architectural theory, heritage conservation, industrial design, environmental design, building comfort, barrier free design, urban sociology, environmental psychology, and safety and security by architecture and town planning, respectively

#### **Further skills at the 'urban design and chief planner/architect' specialization**

- he/she possesses deeper than the average knowledge and skills in the following fields: urban planning, landscape architecture, housing, community building design, urban sociology, environmental psychology, urban infrastructure, real estate development, project management, building law and administration, energy management of buildings, barrier free design, architectural ecology, IT for architects, fire protection, operation of buildings and towns, and safety and security by architecture and town planning

#### **Helping students with outstanding abilities, student research, and talent management in the training process.**

##### **Preparing the students of the major for doctoral training**

Those taking part in the training are prepared to independently solve tasks within the field of science and can become capable of participating in domestic and foreign Ph.D. and DLA training based on the major. During the training, it is possible to participate in the work of the scientific student conference with a long tradition in the framework of which theses can serve as the seed of doctoral training.

The Ybl Miklós Faculty of Architecture of Óbuda University and its legal predecessor are characterized by centuries-old traditions, during which it developed a unique profile. Our goal is to produce the best-qualified architects and engineers capable of renovating the country's aging building stock. That's why we continue to place significant importance - in the technical, artistic, and economic fields - on high-quality design education. During the preparation of the complex planning tasks and the diploma plan, the student can delve deeper into a special part of the profession by preparing an independent task in the field of his choice.

Our educational program alone ensures that the students participating in the training will be able to join most of the postgraduate courses in the European Union after completing their studies. The training is complemented by scientific student conference works: students can pursue additional creative professional activities in the technical, artistic, economic, and environmental fields with the support and guidance of their instructors. Our students can join the work of a department as demonstrators. The best students can take part in a part-time study program abroad thanks to the international connections of the faculty of the major and other scholarship opportunities.

Budapest, June 2023.

## MANDATORY SUBJECTS (A)

Code	Course	Le	P	La	R	Credits	Preconditions
YAXATHFMNF	Architectural Theory	3	0	0	E	3	Cultural History II.
YAXCU1FMNF	Cultural History I.	3	1	0	E	4	-
YAXCU2FMNF	Cultural History II.	3	1	0	E	4	Cultural History I.
YAXREMF MNF	Research Methodology	2	0	0	E	3	-
YAXEEEF MNF	Energy Efficient and Ecological Architecture	2	0	0	E	3	-
YAXCS1FMNF	Construction Studies I.	1	1	0	F	3	-
YAXCS2FMNF	Construction Studies II.	1	1	0	F	3	Construction Studies I.
YAXCO1FMNF	Contemporary Design I.	2	3	0	E	5	-
YAXCO2FMNF	Contemporary Design II.	2	3	0	E	5	Contemporary Design I.
YAXCD1FMNF	Complex Design I.	2	4	0	F	8	-
YAXCD2FMNF	Complex Design II.	2	4	0	F	8	Complex Design I., Community and Urban Planning (for UrbD)
YADFIPFMNF	Final Project	0	18	0	F	26	Complex Specialization in Architecture (for ArchD and UrbD)
XXXXXXXXXX	Physical Education I.	0	1	0	T	1	-
XXXXXXXXXX	Physical Education II.	0	1	0	T	1	Physical Education I.
XXXXXXXXXX	Language Criteria	0	0	0	S	0	

## MANDATORY ELECTED SUBJECTS (B) for Specialization Architectural Design and Interior Design

Code	Course	Le	P	La	R	Credits	Precondition
YAWBLAF MNF	Building Law and Administration	2	0	0	E	3	-
YAWINDFMNF	Interior Design	2	2	0	F	5	-
YAWFPCFMNF	Final Project Consultation	0	4	0	F	4	-
YAWFADF MNF	Form and Design	1	2	0	F	5	Contemporary Design I.
YAWCSAF MNF	Complex Specialization (Architecture)	0	6	0	F	10	Complex Design II.
YAWVEDF MNF	Environmental Design	2	2	0	F	4	Community and Urban Planning
YAWCUPFMNF	Community and Urban Planning	1	2	0	F	3	-
YAWRDAFMNF	Related Disciplines of Design (Architecture)	1	2	0	F	3	Complex Design I, Community and Urban Planning

## MANDATORY ELECTED SUBJECTS (B) for Specialization Urban Design and Chief Planner/Architect

Code	Course	Le	P	La	R	ECTS	Precondition
YAWBLAF MNF	Building Law and Administration	2	0	0	E	3	-
YAWMAAF MNF	Municipal Architecture and Administration	2	0	0	F	3	-
YAWCSUF MNF	Complex Specialization (Urban)	0	6	0	F	10	Complex Design II.
YAWFPCFMNF	Final Project Consultation	0	4	0	F	4	-
YAWVEDF MNF	Environmental Design	2	2	0	F	4	Community and Urban Planning
YAWCUPFMNF	Community and Urban Planning	1	2	0	F	3	-
YAWRDUF MNF	Related Disciplines of Design (Urban)	1	2	0	F	3	Complex Design I, Community and Urban Planning
YCWUAIF MNF	Urban Infrastructure	1	2	0	F	4	Community and Urban Planning
YAWUAMF MNF	Urban Administration	2	0	0	E	3	-

## ELECTIVE SUBJECTS (C)

An updated list of elective subjects can be found on the Faculty website.

**MSc in Architecture – Specialization: Architectural Design and Interior Design**

		1. semester	2. semester	3. semester	4. semester		
lectures/week	1	<b>Cultural History I.</b> YAXCU1FMNF 3/1/0/E/4	<b>Cultural History II.</b> YAXCU2FMNF 3/1/0/E/4	<b>Architectural Theory</b> YAXATHFMNF 3/0/0/E/3	<b>Final Project Consultation</b> YAWFPCFMNF 0/4/0/F/4	1	lectures/week
	2						
	3						
	4						
	5	<b>Research Methodology</b> YAXREMFNF 2/0/0/E/3	<b>Energy Efficient and Ecological Architecture</b> YAXEEEFMNF 2/0/0/E/3	<b>Form and Design</b> YAWFADFNF 1/2/0/F/5	<b>Final Project</b> YADFIPFMNF 0/18/0/F/26	5	
	6						
	7	<b>Community and Urban Planning</b> YAWCUPFMNF 1/2/0/F/3	<b>Related Disciplines of Design (Architecture)</b> YAWRDADFNF 1/2/0/F/3	<b>Environmental Design</b> YAWEVDFMNF 2/2/0/F/4		7	
	8						
	9						
	10					10	
	11	<b>Contemporary Design I.</b> YAXCO1FMNF 2/3/0/E/5	<b>Contemporary Design II.</b> YAXCO2FMNF 2/3/0/E/5	<b>Interior Design</b> YAWINDFMNF 2/2/0/F/5		11	
	12						
	13						
	14	<b>Construction Studies I.</b> YAXCS1FMNF 1/1/0/F/3	<b>Construction Studies II.</b> YAXCS2FMNF 1/1/0/F/3	<b>Building Law and Administration</b> YAWBLAFMNF 2/0/0/E/3		14	
	15						
	16	<b>Complex Design I.</b> YAXCD1FMNF 2/4/0/F/8	<b>Complex Design II.</b> YAXCD2FMNF 2/4/0/F/8	<b>Complex Specialization (Architecture)</b> YAWCSAFMNF 0/6/0/F/10		16	
	17						
	18						
	19						
	20						
	21						
	22	<b>Physical Education I.</b> 0/1/0/T/1	<b>Physical Education I.</b> 0/1/0/T/1			22	
	23						
		<b>Elective Subject (C) 1.</b> 3 credits	<b>Elective Subject (C) 2.</b> 3 credits				

**CRITERIA SUBJECTS TO BE COMPLETED ACCORDING TO RECOMMENDED SEMESTER**

Language criteria subject

<b>CREDIT</b>	<b>27</b>	<b>30</b>	<b>33</b>	<b>30</b>	<b>120</b>
<b>EXAM</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>8</b>

**Explanation:**

**Name of the subject**

Subject code

Lecture / practice / laboratory / F: final mark; E: exam, T: three-level assessment

**MSc in Architecture – Specialization: Urban Design and Chief Planner/Architect**

	1. semester	2. semester	3. semester	4. semester						
1	<b>Cultural History I.</b> YAXCU1FMNF 3/1/0/E/4	<b>Cultural History II.</b> YAXCU2FMNF 3/1/0/E/4	<b>Architectural Theory</b> YAXATHFMNF 3/0/0/E/3	<b>Final Project Consultation</b> YAWFPCFMNF 0/4/0/F/4	1					
2										
3										
4										
5	<b>Research Methodology</b> YAXREMFNF 2/0/0/E/3	<b>Energy Efficient and Ecological Architecture</b> YAXEEEFMFNF 2/0/0/E/3	<b>Urban Infrastructure</b> YCWUAI FMNF ½/0/F/4		<b>Final Project</b> YADFIPFMNF 0/18/0/F/26	4				
6										
7	<b>Community and Urban Planning</b> YAWCUPFMNF ½/0/F/3	<b>Related Disciplines of Design (Urban)</b> YAWRDUFMFNF ½/0/F/3	<b>Environmental Design</b> YAWEVDFMFNF 2/2/0/F/4			<b>Final Project</b> YADFIPFMNF 0/18/0/F/26	5			
8										
9										
10										
11	<b>Contemporary Design I.</b> YAXCO1FMNF 2/3/0/E/5	<b>Contemporary Design II.</b> YAXCO2FMNF 2/3/0/E/5	<b>Municipal Architecture and Administration</b> YAWMAAFMFNF 2/0/0/F/3				<b>Final Project</b> YADFIPFMNF 0/18/0/F/26	7		
12										
13	<b>Construction Studies I.</b> YAXCS1FMNF 1/1/0/F/3	<b>Construction Studies II.</b> YAXCS2FMNF 1/1/0/F/3	<b>Urban Administration</b> YAWUAMFMNF 2/0/0/E/3					<b>Final Project</b> YADFIPFMNF 0/18/0/F/26	8	
14										
15										
16										
17	<b>Complex Design I.</b> YAXCD1FMNF 2/4/0/F/8	<b>Complex Design II.</b> YAXCD2FMNF 2/4/0/F/8	<b>Building Law and Administration</b> YAWBLAFMFNF 2/0/0/E/3						<b>Final Project</b> YADFIPFMNF 0/18/0/F/26	9
18										
19										
20										
21										
22										
23	<b>Physical Education I.</b> 0/1/0/T/1	<b>Physical Education I.</b> 0/1/0/T/1								<b>Final Project</b> YADFIPFMNF 0/18/0/F/26
				11						
		<b>Elective Subject (C) 1.</b> 3 credits	<b>Elective Subject (C) 2.</b> 3 credits							12
										13
										14
					15					
					16					
					17					
					18					
					19					
					20					
					21					
					22					
					23					

**CRITERIA SUBJECTS TO BE COMPLETED ACCORDING TO RECOMMENDED SEMESTER**

Language criteria subject

<b>CREDIT</b>	<b>27</b>	<b>30</b>	<b>33</b>	<b>30</b>	<b>120</b>
<b>EXAM</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>9</b>

**Explanation:**

**Name of the subject**

Subject code

Lecture / practice / laboratory / F: final mark; E: exam



# SUBJECT DESCRIPTIONS

## MANDATORY SUBJECTS (A)

### Architectural Theory

In charge: Ass. Prof. Gergely Nagy PhD

**YAXATHFMNF  
3/0/0/E/3**

The objective of the subject is to offer an overview of the history of architecture theory from Roman times to the end of the 20th century.

Major architectural writers and their works from antiquity to the end of the 20th century and the relationship between the theory and practice of architecture in each era are introduced. Text analysis, comparative analysis are used as methodology.

### Construction Studies I.

In charge: Sr. Lect. Gergely Norbert Vizi PhD

**YAXCS1FMNF  
1/1/0/F/3**

Developing the ability to construct contemporary and ecological structures of architectural spaces.

Examining the structural aspects of architectural space formation, based on the basic structures increasing the ability to recognize and solve situations that require special structural solutions. Learning further modern and ecological structure solution toolkit through specific examples, tasks and studies.

### Construction Studies II.

In charge: Sr. Lect. Gergely Norbert Vizi PhD

**YAXCS2FMNF  
1/1/0/F/3**

Developing the ability to re-construct and rebuild structures suitable for the rebirth of existing historical buildings.

Examination of the structural aspects of existing historical buildings, increasing the ability to recognize and solve situations that require special structural solutions based on the knowledge of historical building structures. Learning additional modern and rehabilitation structure solution toolkit through specific examples, tasks and studies.

### Final Project

In charge: Prof. Gall Anthony PhD

**YADFIPFMNF  
0/18/0/F/26**

The students are supposed to demonstrate the architectural knowledge and the presentation skills they have acquired throughout the entire course. The particular objective is the complex application of this knowledge gained in various subjects, with special attention to the development of their conceptual design attitude, the appreciation of the built environment as a context, the logical arrangement of functions, the identification of aesthetic structural forms and the shaping of quality representative spaces. Here, it is not enough to design just a well-functioning and attractive building, but it is important to interpret the place and to identify social issues, too. The students get to their final proposal step by step through a series of design phases.

### Contemporary Design I.

In charge: Prof. Marcel István Ferencz DLA

**YAXCO1FMNF  
2/3/0/E/5**

A skilled designer must have a balance of visual and technical skills to create designs that meet both aesthetic and functional requirements and are adaptable to our current global challenges. The designer needs knowledge of basic art history, social contexts, contemporary art movements and conceptual thinking and creative methods to be able to practice architecture as an applied art and create cultural value for the community with an added intellectual content, while also meeting the technical requirements for design.

After a brief historical overview of design methodologies, the course will introduce recent methodologies such as deconstructivism, folding, blobism, postmodernism and then focus on contemporary theoretical systems such as regionalism, neo-modernism, re-postmodernism (aka postmodern revival), parametricism and parametric-high tech design. It also explores different design strategies, 'add-ons' such as biophilia, biomorphism, biomimesis and environmental psychology and demonstrates their applicability.

Besides theoretical training, the course also provides methodological exercises such as digital design methodologies, visual management and current visual trends. It will focus on parametric and generative design and its modifications. Applied softwares: parametric and generative design: Maxon Cinema 4D, Rhino+Grasshopper, visual module: Adobe Photoshop and Illustrator, Corona Render, Cycles, Lumion, Twinmotion.

### Contemporary Design II.

In charge: Prof. Marcel István Ferencz DLA

**YAXCO2FMNF  
2/3/0/E/5**

By the end of the second semester of the course, the student should have mastered the practical application of theoretical knowledge and have found his/her own sophisticated visual and creative language, which he/she can use confidently and communicate his/her design effectively and convincingly.

The second semester of the course focuses on putting theoretical knowledge into practice. Finally, through practical exercises in graphic and conceptual arts, the student presents his/her acquired form procreation techniques and conceptual thinking through a synthesis of applied art knowledge in an architectural concept design, which is presented visually and verbally. Applied softwares: parametric and generative design: Maxon Cinema 4D, Rhino+Grasshopper, visual module: Adobe Photoshop and Illustrator, Corona Render, Cycles, Lumion, Twinmotion .

### **Complex Design I.**

In charge: Ass. Prof. Györgyi Csontos DLA

**YAXCD1FMNF**

**2/4/0/F/8**

The goal is to demonstrate and to practice the many sided complexity and interrelationships of building design and to comprehend the interactions among the site, the design program (i.e. the brief) and the future layout, and to make the appropriate decisions, accordingly.

The subject is the first part of the two session complex design exercise of the master program. The students are to get familiar with new situations under the supervision of their tutors. They are to develop proposals individually as well as in teamwork.

Social impacts of the design program and the historical context of the site and the town, respectively, must be investigated.

They are to learn the methodology of analytical designing, the unity and the relationships of form, function and structure, and the cooperation with engineering specialists. The proposals are developed with regular work and weekly consultations. Besides the architectural design jobs, students are to prepare designated engineering specialists' tasks, too.

### **Complex Design II.**

In charge: Ass. Prof. Aurél Benárd DLA

**YAXCD2FMNF**

**2/4/0/F/8**

The objective is to make the students aware and practice the complexity and interrelationships of building design. They are to understand the connections among the site, the brief and the future building layout and to make appropriate decisions. Social, economic and environmental factors are to be also considered. Communication means to successfully present the design proposals at the various design phases, including to the final public jury, are also to be mastered. This project is the second part of the two session long complex design exercise of the master program, and is about further developing one of the design projects from the previous session.

### **Cultural History I.**

In charge: Ass. Prof. Gergely Nagy PhD

**YAXCU1FMNF**

**3/1/0/E/4**

The students are provided with comprehensive information about the disciplines of rehabilitation of buildings and heritage conservation. They get an insight into the typical building structures of the second part of the 19th century and the turn of the century, respectively. As a practical exercise, they are to deal with simple rehabilitation design tasks. The curriculum comprises typical building structures of the historical revival period, typical problems of historical buildings' renovation, and their solutions, the method of building diagnostics, building archaeology and documentation, and the relevant legal context, There will also be some case studies in the history of heritage conservation and contemporary projects, including their critical analyses.

### **Cultural History II.**

In charge: Prof. Rudolf Klein PhD

**YAXCU2FMNF**

**3/1/0/E/4**

The subject is divided into two parts: one half is about the history of landscape architecture, and the other half is about contemporary architecture and its routes, to complement the curriculum of the history of architecture course in the undergraduate program. The landscape section reviews the different design styles throughout history, including the relationships between buildings and gardens and landscapes, respectively. This latter gets particular emphasis in contemporary practice. The architectural section discusses the historical roots and the intellectual background of contemporary movements and their relationship with other forms of art and philosophy, respectively. Besides formal lectures, students will, with the help of consultations, prepare their own studies of a selected topic. Possibly, there might be some smaller 'excursions' to the worlds of philosophy, music and literature, too. This part is also to synthesize the topics of Cultural Studies II.

### **Research Methodology**

In charge: Ass. Prof. Zsuzsanna Katalin Fáczányi PhD

**YAXREMFNF**

**2/0/0/E/3**

A team-based course for the transfer and application of theoretical and practical knowledge of research. The main purpose of the course is to encourage and prepare students for research in architecture topics and to prepare for the possibility of doctoral training.

In the first part of the semester, the groups carry out a critical analysis of selected research: understanding, evaluating and presenting the purpose, methodology and method of data collection. This is the basis of the semester task of building a research plan for a chosen topic, which helps exercising a consistent process and methodology.

### **Physical Education I., II.**

**XXXXXXX**

**0/1/0/T/1**

A detailed description of the educational purpose and content of the subject can be found on the website of the Physical Education Group.

## MANDATORY ELECTED SUBJECTS (B)

### Interior Design

In charge: Ass. Prof. Csaba Rohoska DLA

YAWINDFMNF

2/2/0/F/5

The objective is to introduce the students to interior design through the shaping of interior architectural space. A considerable emphasis is put onto the presentation and application of various products by local and international manufacturers in relation to architectural tasks selected, including traditional and experimental modes. Students will learn a wide range about those materials, objects and products (lighting, finishes, furniture) they less frequently meet in the course of their architectural designs. Applying them, they will also solve a problem connected to their previous complex design project. During the session, students will also learn how to present interior design ideas freehand and with CAD, as well. There is an important emphasis put on complexity.

### Building Law and Administration

In charge: Zsuzsanna Putnoki, Dt

YAWBLAFMNF

2/0/0/E/3

The general aim is to provide the students with some basic knowledge of building law and administration. The curriculum includes the foundations of civil law and public administration, the legal concept of real estate, the players of the development process, and the role and place of public administration. There is a special attention to information on statutory administration procedures and services through practical examples and exercises.

### Complex Specialization (Architecture)

In charge: Prof. Gyula Gábor Kiss DLA

YAWCSAFMNF

0/6/0/F/10

The objective is to prepare the students for their final project. After completing the master course, the students are to take their own positions. They are to apply in complexity the knowledge they have acquired in various subjects throughout the whole course, with special attention to the development of their conceptual design attitude and how it is exercised, including the fitting of their proposals into the existing built fabric, the logical and clear linking of functions and the formation of aesthetic structures and quality spaces, respectively.

The forms of tutoring include a practical week with partly individual and partly with teamwork. The proposals will be presented at each main design phase, and the final proposal is to be presented to and discussed with a public jury.

### Complex Specialisation (Urban)

In charge: Ass. Prof. Aurél Benárd DLA

YAWCSUFMNF

0/6/0/F/10

The course is to prepare the students for the high quality elaboration of their graduation (final) project. They are to apply the knowledge of urban planning and design acquired during the program. The aim is the preparation for integrated environmental planning and design, including problem solving in an interdisciplinary manner. Students' practical job is to elaborate an urban design scheme based on complex surveys, following the steps of urban planning process, including the integration of considerations by contributing engineering services. During the session, students are to work individually, as well as in teams, as a preparation for the individual final project work

### Energy Efficient and Ecological Architecture

In charge: Ass. Prof. Viktória Sugár PhD

YAXEEEFMNF

2/0/0/E/3

Educational purpose is to acquire basic knowledge in the field of energy-conscious building design ad systems. Building energy foundations, in particular the role of legal concepts and international aims. Energy efficiency architectural solutions. Basic concepts of building physics and thermal design. Complex renewable building engineering systems.

### Environmental Design

In charge: Ass. Prof. Zsuzsanna Katalin Fáczányi PhD

YAWEVDFMNF

2/2/0/F/4

The objective is to analyse and to evaluate the perception and the appreciation of the environment, to get acquainted with the means of developing the environment and the search for the balance of sustainability and aesthetics in both urban and rural settings at various scales, including historical aspects. Practical exercises are also included. The subject curriculum includes the history of urban space and landscape, the different scales and types of environmental design, the relevant requirements of different land use activities and the options of environmental sustainability, including ecology and rehabilitation.

### Final Project Consultation

In charge: Prof. Gall Anthony PhD

YAWFPCFMNF

0/4/0/F/4

During the semester, students develop a "complex" plan for a specific site. During complex examination of the specified site, the student finalizes the design program, on-site inspections, studies, and explores his task with the help of creative exercises. Review and follow up of the technical and artistic content of the thesis is part of the subject. Determining optimal presentation techniques and methodologies. During the semester, the "jury members" delegated by the department will evaluate and counsel the entire class.

**Form and Design**

In charge: Prof. Gall Anthony PhD

**YAWFADF MNF****1/2/0/F/5**

'Form and Design' gets focus in architecture at two relations: at the process of the design of the architectural elements and at design of the elements of the inner space, the objects of use. The aim of the course is to make the students aware of the importance of these relations and the role of the architect at them. We introduce principles of contemporary form and design of the last 50 years, students will learn about materials, objects and products (lighting, finishes, furniture and objects) and about contemporary trends and designers, and have to make a study, develop a design and prepare a model.

**Community and Urban Planning**

In charge: Ass. Prof. Zsuzsanna Katalin Fáczányi PhD

**YAWCUPF MNF****1/2/0/F/3**

The aim is to introduce the students to the notion of public participation in urban planning. Both theory and practice of the interrelationships between town as a public space and its participative planning are covered. The students get an insight into such relevant topics as the notions of the 'urban' and the 'public', the 'smart city', the analyses of 'green vs. brown field' developments, the systematic listing of the particular values of a township (including e.g. image guidelines), real estate valuation, and the issues of future urban centres, respectively. The course also includes urban and architectural design exercises related to relevant actual urban development problems.

**Related Disciplines of Design (Architecture)**

In charge: Prof. Gyula Gábor Kiss DLA

**YAWRDAF MNF****1/2/0/F/3**

The subject is a complementary element of Complex Design II. The objective is to get the students acquainted with legal and technical requirements of engineering specialists' contribution to architectural design and to prepare them for the practical side of it. There are lectures, professional visits, presentations and consultations in the program, related to the main fields of engineering services that contribute to architectural design. Students are expected to conduct their own piece of research, too, and to write a report on the information, practical procedures, calculations and professional guidelines gained throughout the session.

**Related Disciplines of Design (Urban)**

In charge:

**YAWRDUF MNF****1/2/0/F/3**

The subject is a complementary element of Complex Design II. The objective is to get the students acquainted with legal and technical requirements of engineering specialists' contribution to architectural design and to prepare them for the practical side of it. There are lectures, professional visits, presentations and consultations in the program, related to the main fields of engineering services that contribute to architectural design. Students are expected to conduct their own piece of research, too, and to write a report on the information, practical procedures, calculations and professional guidelines gained throughout the session.

**Urban Infrastructure**

In charge: Ass. Prof. Klára Éva Macsinka PhD

**YCWUAIF MNF****1/2/0/F/4**

The subject is to introduce the students to the basic notions, the elements and the operational principles of urban infrastructure, including the catchment of urban centres, too. Transport, water and energy supply, their management organisations and the network of open spaces and their relationships, respectively, will be discussed. After reviewing the basics, the processes of their development are dealt with.

**Urban Administration**

In charge: Lect. Előd Kámán

**YAWUAMF MNF****2/0/0/E/3**

The subject is to introduce the tasks of municipalities and the state in the administration of the municipalities. Structure, functioning of the municipalities, role of officials and representative body. Urban management and infrastructure. Budget management, property management and real estate management. Local taxes. Municipal developments. Procurement process. Tasks of county and municipal authorities in the development of land and settlements. Public interest and private interests.

**Municipal Architecture and Administration**

In charge: Sr. Lect. András Krizsán DLA

**YAWMAAF MNF****2/0/0/F/3**

The Municipal Architecture and Administration tasks related to urban development and settlement planning, documents for urban development: urban development concept, integrated urban development strategy, documents of settlement planning. Specific legal institutions. Municipal image procedures and townscape protection regulation. Spatial planning plans, their hierarchy – national, regional, county. Tasks related to heritage and nature conservation. Partnership and communication.

## COURSE DESCRIPTIONS – CRITERION SUBJECTS

### Language criterion subject

XXXXXXXXXX

In charge: Márta Anna Salamon

0/0/0/A/0

The educational goal of the subjects is the practical, professional development of foreign language skills.  
A detailed description of the content of the subjects can be found on the website of the Faculty.