



Study program	Architecture and Design (2025/2026)
Faculty	Technical Sciences
Study Cycle	Second Cycle (Postgraduate)
ECTS	120
Code	AD-120
Title	Master (MSc) of Architecture
Accreditation archive number [120]	03-856/3
Accreditation archive number []	
Decision for starting of the program	
Accreditation date	27.10.2025

Description of the program

In the second cycle of studies in Architecture and Design, students acquire 120 ECTS credits which are added to the previously acquired 180 ECTS credits (completed first cycle of studies), with which the student acquires a total of 300 ECTS credits. The greater academic and theoretical orientation in the second cycle of studies and the increased complexity of the assigned tasks complement the previously acquired education (the first six semesters in which professional orientation prevails in the studies). The student completes the second cycle of studies by passing all the prescribed exams, completing the obligations stipulated by the subject program and preparing and successfully defending the master's thesis. The master's thesis in the field of architecture is an architectural or urban project, and theoretical research on a certain topic, which the student performs under mentorship, for a maximum duration of one year. The second cycle of studies in architecture ends with the public defense of the master's thesis. This rank leads to a complete Master Engineer Architect profile and access to the profession.

With the realization of the goals of the study program, the development of professional staff with an appropriate level of education, professional and scientific readiness to face the challenges of space, the built environment and construction in the Republic of North Macedonia is expected.

The study program aims to:

- enable successful education in the mandatory components and areas of the education of architects with a high degree of scientific and professional preparation,
- enable an appropriate level of openness for future architects to enter different levels of the labor market,
- create experts in the field of architecture, urbanism and planning who will contribute to the further development of the profession, scientific and practical knowledge.

Career

Completion of the second cycle of studies in Architecture and Design completes the architectural education with modern professional and scientific knowledge of the personnel and professionals in the field of architecture, urbanism and planning. Graduates can work in architectural design and construction companies, local government units and other state institutions, public enterprises, as well as architects in scientific institutions and universities. This enables access to the architectural

profession at different levels and in different areas, offering a comprehensive response to the needs of the labor market in the Republic of North Macedonia.

Learning outcomes

Knowledge and understanding

Demonstrates knowledge and understanding in the field of study that is build upon general secondary education and qualifications for entry into higher education.

Demonstrates knowledge and understanding necessary to analyze architectural and urban problems and synthesize them in design and planning solutions for different degrees of complexity, scale and type of buildings and spaces.

Demonstrates knowledge and understanding of the functional, psychological and sensory relationships that exist between people and the interior space and the role of shape, color, materials and new technologies in interior design.

Demonstrates knowledge and understanding of principles related to materials, constructions, installation systems and energy balances and their appropriate application in the design and construction of buildings.

Demonstrates knowledge and understanding necessary to establish appropriate attitude towards the building heritage in its protection and revitalization.

Applying knowledge and understanding

The acquired knowledge and understanding of professional problems can be applied in the preparation of basic or other types of detailed projects or documentation, from all domains of architectural or urban planning.

Applies knowledge and understanding based on knowledge of different concepts from the theory and history of architecture and the city and modern theory and practice in the process of shaping buildings, cities and the environment, taking into account aesthetic requirements, social needs and related requirements with the environment.

Making judgement

Demonstrates the ability to collect, analyze, evaluate and present information, ideas and concepts from complete, incomplete or limited relevant data, for key areas in the process of planning, designing and implementing facilities and space.

Demonstrates the ability to select appropriate methods, tools, and skills tailored to specific conditions and different degrees of complexity, scale, and type of objects and spaces.

Communication skills

Demonstrates the ability to communicate and use graphic, written and oral communications in the service of conveying one's own ideas and user needs in the process of creating and implementing projects in the fields of architecture and urbanism, as well as in the field of protection and revitalization of construction heritage.

Demonstrates the ability to participate in expert discussions, uses consultations on specific problems from complementary areas and is able to take professional responsibility in the team.

Learning skills

Demonstrates ability independently to identify needs for continuous education and professional development, engages in modern forms of learning and familiarity with technological innovation and can critically evaluate the appropriateness of learning methods, their impact on knowledge, skills, competence and relevant practice for his/her professional development.

List of courses

Semester 1

- [CM260] [6.0 ECTS] **Design of Husbandry Buildings**
- [CM261] [6.0 ECTS] **Interior Architecture of Public Buildings**
- [CM262] [6.0 ECTS] **Documentation and Research of Architectural Heritage**
- [CM259] [6.0 ECTS] **Design Studio V**
- [6.0 ECTS] **Advanced elective course in Architecture and Design**

Semester 2

- [CM264] [6.0 ECTS] **Design and Urban Shaping**
- [CM266] [6.0 ECTS] **Conservation and Restoration of Architectural Heritage**
- [CM265] [6.0 ECTS] **Details in the Interior Design**
- [CM263] [6.0 ECTS] **Design Studio VI**
- [6.0 ECTS] **Advanced elective course in Architecture and Design**

Semester 3

- [CM267] [6.0 ECTS] **Design Studio VII**
- [CM268] [6.0 ECTS] **Design of Industrial Buildings**
- [CM269] [6.0 ECTS] **Furniture Design**
- [CM270] [6.0 ECTS] **Energy Efficient Buildings**
- [6.0 ECTS] **Advanced elective course in Architecture and Design**

Semester 4

- [CM271] [24.0 ECTS] **Master Thesis (Project and Theory)**
- [CM272] [6.0 ECTS] **Environmentally Efficient Facilities**

Description of courses

Core courses

- **Design of Husbandry Buildings**

Training students with knowledge in the field of planning and design of business facilities, their typology and conditions for their program organization. Familiarity with new typologies of animal shelters [urban farms]. Analyze new spatial and functional concepts [hybrid content].

- **Interior Architecture of Public Buildings**

Introducing students to the discipline of interior architecture. Chronological development of the various concepts of shaping the interior architectural spaces.

- **Documentation and Research of Architectural Heritage**

Introducing students to the importance and role of the architect in the protection of cultural heritage (especially real estate construction heritage). Training students for: - active attitude towards the construction heritage through theoretical and practical procedures in the process of its protection - correct (analytical and constructive) approach when designing in a historical environment.

- **Design Studio V**

Students are trained in the practical application of the knowledge of architectural design of specific objects in the fields of culture (visual objects, musical and performing arts, libraries, etc.).

- **Design and Urban Shaping**

The aim of the course is for students to face the real complexity of urban shaping and the urban phenomenon, to master interdisciplinary methods and techniques for recording and analyzing an urban situation and to use urban methods, techniques and tools to create an urban solution that will enable harmonious spatial development of the part of the city.

- **Conservation and Restoration of Architectural Heritage**

Acquiring basic knowledge about: - the reasons for degradation and collapse of buildings and entities - types of methods for conservation and restoration and their application -theoretical-practical approaches for consolidation and renovation of buildings and units, due to their appropriate modern purpose.

- **Details in the Interior Design**

Introducing students to the basic nature of the interior architectural space that the relational model takes as its basis.

- **Design Studio VI**

The main goal of the course is for students to face the real complexity of the urban phenomenon, to master interdisciplinary methods and techniques for recording and analyzing a city situation and to use urban methods, techniques and instruments to create an urban solution that will enable harmonious spatial development of the part of the city.

- **Design Studio VII**

Establishment of methodology for design or reuse of industrial facilities and complexes and basic procedures for development of the project program through analysis of different work environments and conditions. Analyzing the technological process-turnover and other functional needs from the aspect of architectural design.

- **Design of Industrial Buildings**

Deepening the knowledge and skills for planning, programming and design of industrial complexes and facilities. The course studies the design of industrial buildings, which contains industrial buildings of industrial infrastructure. The aim of the course is to acquaint and educate students with the architecture of industrial heritage. Familiarity with the principles and methods for analysis, evaluation and design approach in interventions on buildings or structures with confirmed architectural value. The architecture of industrial heritage within the subject is studied in the context of technical history and architectural urban practice.

- **Furniture Design**

The course aims to introduce students in the process of designing furniture for residential spaces by getting to know it as well as the terms function, construction, ergonomics, economy, shaping.

- **Energy Efficient Buildings**

Improving energy characteristics, both for new and existing facilities, through economically justified measures. Energy saving through planned development of projects, which in a structural and efficient way, with well-developed methods and tools for energy evaluation and project management, will provide students with the acquired knowledge about the principles and methods for analysis of certain architectural problems, pointed out in the thematic areas of the course, successfully to implement them in the process of designing the construction and reconstruction of the buildings. Familiarity with new technologies and materials used to achieve the new EU-level goals of reducing energy consumption and greenhouse gas emissions.

- **Master Thesis (Project and Theory)**

This module enables students to transfer their skills and knowledge to research and make more complex task of the master thesis. The module is designed to be fully practical and students to acquire the necessary knowledge and skills to approach writing the thesis. The module has unique return result-to enable students to write the master thesis with minimal difficulties, and with maximum efficiency. The course aims to improve research techniques and style of writing paper, taking into account stopping illegal means, such as plagiarism and infringement of copyright, which are prohibited by the Statute of SEEU.

- **Environmentally Efficient Facilities**

Introduction of students to the basic aspects and principles of the disciplines of: environmental facilities, the role of environmental facilities for environmental protection, sustainable architecture, bioclimatic architecture, interdisciplinary architecture.

Elective courses

- **Lighting in Architecture**

This course covers the problem of lighting the space with natural light. The purpose of the course is students to get acquainted with the influence of natural light on the quality of architectural space. Natural light and its distribution needs to be treated as a formative and substantive category in the creation of architectural space. The way in which natural light is introduced into space affects the shaping of space in ontological terms, and at the same time is an element of connection in unity with its environment and its processes.

- **Color, Design and Architecture**

The purpose of this course is for students to get acquainted with colour in design and architecture and with the principles and methods in design. To develop the ability to understand development principles, norms and applications for design and architectural design with the help of colour as a project tool. The student should be taught

how to develop and become familiar with the principles of design.

- **Modern City and City Planning**

Life in the modern city becomes a complex phenomenon, permeated by ideas, movements and innovations in the media, technology, culture, migration, changes in nature/ environment, semantics, psychoanalysis. Therefore, the course aims for students to get acquainted with the broad field of modern theory of architecture in the modern city and city planning, by studying the most influential theorists, architects, philosophers and architectural direction/ schools that emerged after the first wave of modernism with Le Corbusier. At the end of the course students are expected to: - be enabled to contextualize the modern city in a multi-perspective way in relation to the developments in global culture, politics, philosophy, social events, psychoanalysis and language theory.

- **Industrial Design**

Introduction to industrial design as an integral part of design, its basic methods and parameters as a condition for successful shaping and design.

- **Parametric and Information Models in Architecture**

The purpose of this course is for students to get acquainted with the principles and foundations of information models in architecture, the way of their development and their application in the process of analysis, shaping, design and use of information models in architectural objects.

- **City Traffic Planning**

The purpose of this course is for students to get acquainted with the basics of traffic infrastructure and its importance on the spatial development of the urban environment. Mastering the basic principles of planning the urban traffic system and the elements that are constituent parts of the system.