MINISTRY OF EDUCATION AND SCIENCE OF RUSSIA

Federal State Educational Institute of Higher Education
"Moscow Architectural Institute (State Academy)"

ANNOTATION TO THE WORK PROGRAM OF THE DISCIPLINE (MODULE)
Architectural Projects Level I (B1.O.01)

Assigned to the department:	**Fundamentals of Architectural Design**
Educational Level:	**Bachelor**
Specialization:	**07.03.01 Architecture**
Basic professional educational program of higher education:	**Architecture**
Form of study:	**full-time**
Hours/credits:	**864 hrs (24 credits)**

The work program for a discipline (module) is based on:

1) Federal State Educational Standard for Higher Education 07.03.01 Architecture, approved by the order of the Ministry of Education and Science of Russia No 509 of 08.06.2017
2) Curriculum for the specialization 07.03.01 Architecture, approved by the Academic Council of MARCHI. Minutes No 6-18/19 of 27.03.2019.
The work program of the discipline (module) was approved at a department meeting. Minutes: No 06/19 of 18.06.2019.

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INTRODUCTORY PART

1. Goals of Mastering the Module

Theoretical and practical mastery of the fundamentals of the architectural design methodology, understanding of the role and responsibility of a professional in creating components of the built environment according to modern requirements of society, the development of culture and personality. Mastering the discipline is aimed at formation of a competent, creative, critical thinking professionals with high moral principles, responsible for health, safety, and welfare of the environment.

As a result of mastering the discipline, the student must:

Know: fundamentals of theory and methods of architectural and related areas of environmental design, methods of collecting and analysis of pre-project documentation, architectural solutions for buildings and volumetric structures, fundamentals of visual perception and principles of setting forms and spaces in order;

Be able to: collect and analyze initial information, put forward a project idea and consistently develop it during the development of an architectural solution for an accessible and comfortable environment, be able to evaluate, select and integrate into the project structural systems and climate control.

2. The Place of the Module in the Educational Program of the Institute

2.1. The discipline consists of 2 stages: Stage 1 - graphic and compositional work during the first year of study; Stage 2 - project design during the second year. Each stage consists of several sequential topics: Stage 1 contains 6 topics, 10 hours per week are allotted for each of them, and Stage 2 contains 5 topics, 10 hours are allotted for each of them. The module contains a series of projects of the basic and variable part of FAD (Fundamentals of Architectural Design), that are aimed at teaching the basics of professional project design activity. The course is focused on the development of spatial thinking, imagination, compositional abilities of students, as well as on mastering the skills of presenting architectural objects using various display techniques. Project work is done by students during each year.

2.2. A list of subsequent academic disciplines that require knowledge, skills and abilities formed by this academic discipline:

Project work during subsequent years of study

Subsequent disciplines:

Architectural Projects;

Architectural structures;

Engineering landscaping and transport

3. Requirements for the results of mastering the discipline (module)

The study of this discipline is aimed at developing in students the following competencies in accordance with competency achievement indicators:

GPC-1. General Professional Competencies (GPC). Able to present design solutions using traditional and modern technical means of presentation at the proper level of mastery of the basics of artistic culture and three-dimensional thinking.

GPC-1.1. Is able to: Present an architectural concept. Participate in the design of presentation material, including presentations and video materials. Select and apply optimal techniques and methods for depicting and modeling architectural forms and spaces. Use design automation tools and computer modeling for architectural visualization.

GPC-1.2. Knows: Methods of visual presentation and modeling of architectural form and space. Means of expressing architectural ideas including graphic, models, computer, verbal, video. Peculiarities of perception of various forms of architectural representation or an urban planning project by architects, urban planners, construction professionals, as well as persons who do not have a professional background in architecture.

PC-2 Professional Competence (PC). Able to participate in the development and design of the architectural and design section of the project documentation.

PC-2.1. knows how to: participate in justifying the choice of architectural objects (including taking into account the characteristics of persons with disabilities and groups of persons with limited mobility); - participate in the development of project documentation; carry out calculations of technical and economic indicators; use computer-aided design and automation software in architectural projects.

PC-2.2. knows: legal and regulatory requirements for architectural design; - social, urban, historical and cultural, spacial, functional and technological, constructional, compositional, artistic, ergonomic requirements for various environmental objects; composition and rules for calculating technical and economic indicators used in technical and economic calculations of design solutions; - methods and techniques of computer-aided design, basic software packages for design, creation of drawings and models.

UC-1. Universal Competence (UC). Able to search, critically analyze and synthesize information, apply systematic approach to solving problems.

UC-1.1. is able to: Participate in pre-project research, including historical, cultural and sociological. Use tools and methods for working with bibliographic and iconographic sources. Document the results of work on collecting, processing and analyzing data, including using automation and computer-aided design and modeling tools.

UC-1.2. knows: The main sources of information, including regulatory, methodological, and reference sources. Types and methods of conducting pre-project research, including historical and cultural. Tools and methods for working with bibliographic and iconographic materials.

UC-2. Universal Competence (UC). Able to determine the set of tasks within the set goal and choose the optimal ways to solve them based on current legal norms, available resources and other limitations.

UC-2.1. is able to: Participate in the analysis of the project tasks, the selection of methods and means for accomplishing them. Act in compliance with legal norms and implement anti-corruption measures.

UC-2.2. knows the requirements of the current codes and regulations for architectural design, sanitary standards, including requirements for organizing an accessible and barrier-free environment for persons with disabilities and low mobility persons. Requirements of anti-corruption legislation.

Main Part

1. Module Scope and Types of Academic Work

Type of academic work	Hours	Semesters / Trimesters			
		1	2	3	4
Classroom work	**520**	**130**	**130**	**130**	**130**
Lectures (LEC)		0	0	0	0
Practical lessons (PR)	512	128	128	128	128
Work in groups (GR)		0	0	0	0
Classroom work spent during attestations (AT)	8	2	2	2	2
Self-preparation for the exam (SP)		0	0	0	0
Independent work	344	113	86	77	68
Type of intermediate attestation		test	test	test	test
Total hours:	864	243	216	207	198
Credits:	24	6.75	6	5.75	5.5

1 credit = 36 academic hours.

2. Sub-modules, topics and types of educational activities

Se-mes-ter	Sub-mo-dule	Topic	LEC	PR	GR	AT	SP	Total hours
1	1	Topic 1. Drawing of a small architectural structure in orthogonal projections.	0	30	0	0	24	54
1	1	Topic 2. Architectural tectonics.	0	50	0	0	45	95
1	1	Topic 3. Drawing of a part of an architectural monument expressing its shape using the ink wash technique.	0	48	0	2	44	94
Total in semester:								**243**
2	1	Topic 4. Font compositions in architecture.	0	26	0	0	20	46
2	1	Topic 5. Drawing of the elevation (cross-section) of an architectural object and expressing its shape and artistic characteristics using architectural graphics.	0	52	0	0	34	86
2	2	Topic 6. Design of a small structure in a spatial environment	0	50	0	0	32	84
Total in semester:								**216**
3	2	Topic 7. Design of a building with the simplest spatial structure	0	64	0	0	37	101
3	2	Topic 8. Project of a single-family attached residential building.	0	64	0	2	40	106
Total in semester:								**207**
4	2	Topic 9. Project of a small public building with a hall	0	64	0	0	34	98
4	2	Topic 10. Project of a small building with a mixed spatial structure	0	64	0	2	34	100
Total in semester:								**198**
Total:								**864**

The Fund of Assessment Tools is a mandatory section of the Work Program of the Discipline (WPD) (developed as a separate document).

Note: The Fund of Assessment Tools - a set of assessment materials as well as a description of forms and procedures designed to determine the level of student achievement of established learning outcomes.