

CAUCASUS UNIVERSITY



კავკასიის არქიტექტურისა და დიზაინის სკოლა
CAUCASUS SCHOOL OF ARCHITECTURE AND DESIGN

Undergraduate Program in
Architecture



Caucasus University
Caucasus School of Technology

Program Name	Architecture (Delivered in English)		
Degree level	Bachelor's		
Type of the educational program	Academic		
Instruction Language	English		
Expected Qualification			
	In English:	Bachelor of Architecture	0731
	In Georgian:	არქიტექტურის ბაკალავრი	0731
Date of Program Approval	Order #01/01-26, 13.06.2022		
Academic head of the Program	Mariam Menabde, PhD.		
Program Volume in Credit Hours			
<p>The Bachelor's Degree Program in Architecture comprises 240 credits. Caucasus University uses European Credit Transfer and Accumulation System (ECTS) to describe volume of expected work from the students. A credit is a unit for volume of work that is required from the students in terms of time spent. 1 ECTS credit is worth of 25 hours of student's academic workload, which includes class hours and time spent on independent work (midterm and final examinations, as well as homework assignments).</p> <p>Consequently, the standard official duration of the Bachelor's Degree Program is four years.</p> <p>After expiration of the standard duration of the Bachelor's Degree Academic Program, the students having academic debts, with the view of completing the program, are allowed to continue education through additional semesters (no more than 4) by retaining the student's status.</p> <p>The program is structurally divided into narrow sphere and free component learning courses:</p> <p><u>Learning courses of narrow sphere (200 ECTS):</u></p> <ul style="list-style-type: none">• Compulsory courses -190 ECTS;• Optional courses - 10 ECTS. <p><u>Learning courses of free component (40 ECTS credits):</u></p> <ul style="list-style-type: none">• Compulsory University courses - 25 ECTS;• Optional University courses - 10 ECTS;• Free credits - 5 ECTS.			
Admission Requirements	<ul style="list-style-type: none">• Any person having a secondary education is entitled to enroll in the Undergraduate Program in Computer Science. The precondition for admission to the program is to pass the Unified National Examination. Any exceptions to the Law on Enrolment at Higher Education Institutions are allowed only in the cases prescribed by Law.• Passing the English Language as a foreign language exam in the Unified National Examinations. is a mandatory requirement for the program enrollment.• Prospective students eligible for the program without having passed the Unified National Examinations must confirm English language B2 level proficiency (IELTS-6.0; TOEFL-78; or other relevant international certificate confirming B2 level proficiency) or he/she has to pass an English language B2 level exam administered by the University• Mobility to the program is allowed in accordance with procedures set by the relevant law.		

Program Description

Program Objectives

The objectives of the program are:

- 1) To give the student a broad, theoretical architecture-oriented knowledge that he / she will successfully use in architectural design;
- 2) The student acquires multidisciplinary (synthetic) theoretical and practical knowledge based on research, so that he / she can integrate architectural directions based on system analysis;
- 3) The student will be able to design in a historical and urban environment using global architectural values, taking into account the principles of sustainable architecture, safety and professional ethics.

Learning Outcomes

Upon completion of the program, the graduate will acquire the following competencies:

- 1) Describes the theory of the history of architecture and related academic fields: art, technology, social sciences and humanities;
- 2) Shares socio-cultural, architectural values and contexts in urban planning, as well as responsibilities for environmental protection and architectural heritage;
- 3) Describes the procedures and processes necessary for the development of architectural projects / concepts, as well as some aspects of design theory and methods;
- 4) When designing, considers the structures, materials, constructions related to building systems, construction processes, technologies and other engineering issues;
- 5) Considers public requirements, customer and user interests, industry legal regulations and professional ethics of architects, the role and importance of the profession of architecture in the processes of environmental planning, building design, construction, landscaping and operation;
- 6) Forms the project concept with an imaginative and creative approach, three-dimensional, spatial thinking and creates an architectural project in accordance with the pre-defined instructions, taking into account the requirements of functional, technical, aesthetic and professional ethics;
- 7) Develops and documents the architectural project based on the analysis of the information collected for the project assignment and in accordance with the pre-defined instructions;
- 8) In the project, as a whole summary document, simultaneously considers and reflects the constructions, technologies, technical, aesthetic and operational properties of materials, as well as transport, communication, technical and safety systems;
- 9) Uses electronic, graphic, modelling, verbal, written, multimedia methods when designing, presenting and discussing an architectural project;
- 10) In the process of architectural design, in compliance with the requirements of professional ethics and the principles of responsibility, works individually or in a team and establishes communication in this process;
- 11) Identifies individual learning needs and plans their professional development;
- 12) Considers the impact of climate change on architecture, the importance of ethical issues, sustainable architecture and occupational safety in architecture.

Areas of employment

The degree obtained will enable the graduate to be employed in different types of organizations, be it a government structure, a private business company or others.

Potential employers in the Georgian labor market can be university partner organizations, as well as state and private architectural firms, construction companies, state structures (City Hall, etc.), local self-government structures (licensing, regulatory and controlling):

- Architectural firms and design studios;
- Historical-cultural heritage protection services and foundations;
- Architectural-construction and development companies;
- Firms responsible for measuring works and others.

Study Continuation Opportunities

The program graduates can continue their studies at any of Master's Degree programs in accordance with the regulation required by the law.

Teaching and Learning Methods

Different teaching methods are employed during the teaching process depending on the topics covered. Those include: **Discussions/debates** – one of the most common methods of interactive teaching. Quality of Students' involvement is higher; classes are more dynamic and students are more active. Any discussion can turn into a debate. The method allows professors to give questions and get answers and enables students to develop skills of discussion and debates and prepares them for justifying their opinions and points.

Team (Collaborative) work - the method implies dividing students into teams and assigning different tasks to them. Each team member works on the task individually and shares his/her ideas with the rest. Depending on the type of task, team members can change tasks and roles. The strategy ensures students' maximum involvement in the learning process.

Problem Based Learning (PBL) – a problem is given and analyzed in order to acquire knowledge.

Cooperative Learning – where the whole class is responsible not only for his/her own learning and understanding of the subject matter but also for aiding and assisting others in better understanding it. Each student works on a problem until he/she fully understands everything.

Heuristic method – is largely incremental. Students are to discover facts on their own and make links between them.

Case Studies – Professors and students discuss a particular case and fully comprehend an issue at hand. In Medicine it can be discussion of the medical record of a particular patient, in Political Science it can be analysis of a conflict between any two countries (e.g., Armenia-Azerbaijan), etc.

Brain storming – the method facilitates to generating as many ideas about a particular topic as possible. The method encourages creativity; it is particularly efficient with a large group of students and consists of a few stages:

- Creative approach to a problem/issue
- Listing the ideas generated, without any criticism, on the board.
- Identifying the ideas most closely linked with the problem/issue;
- Identifying criteria for finding which idea is more relevant to the issue/problem at hand;
- Evaluating selected ideas according to pre-selected criteria;
- Selecting the best idea – the one having the best evaluation or meeting most of the criteria;

Role play – students are assigned different roles, which allows them to look at a problem from different perspectives. Like debates, role play also helps students develop skills needed for giving their opinion and justifying their judgments.

Method of Demonstration – displaying visual materials. In majority of cases, it is better to give students both audio and visual material simultaneously; the material can be given by both - professors and students; the method implies giving visual information on the whiteboard or carrying out a complex laboratory experiment.

Induction, Deduction, Analysis, Synthesis.

A deductive approach means that the teacher gives students a new concept, explains it and then has the students practice using the concept.

In contrast with the deductive method, inductive instruction makes use of student "noticing". Instead of explaining a given concept and following this explanation with examples, the teacher presents students with many examples showing how the concept is used. The intent is for students to "notice", by way of the examples, how the concept works and fits together.

With the method of analysis, a problem is disintegrated into components. This method facilitates to comprehensive analysis of each of the constituent elements of a more complex problem.

Method of synthesis is opposite of the process of analysis. One whole is made by grouping its constituent elements, which allows students to look at a problem as one whole.

Explanatory method – discussing a particular issue, i.e., professor provides examples and discusses all sides and details.

Action-oriented teaching – requires active participation of both professor and students where major emphasis is put on practical interpretation of theoretical knowledge.

E-learning - The method combines three ways of instruction

Teaching methods complement each other during the teaching process. Course syllabus provides detailed information about teaching methods used.

Human Resources

The Program is implemented by 27 Academic and Invited Personnel: 4 Professors (2 affiliated), 1 Associate Professor (affiliated), 3 (2 affiliated) Assistant-Professors and 19 Invited Lecturers, who, according to their qualification are ready to help students in developing the competencies, defined by the program.

Program Curriculum

№	Course Code	Prerequisite	Course	Year								ECTS
				I		II		III		IV		
				I Semester	II Semester	III Semester	IV Semester	V Semester	VI Semester	VII Semester	VIII Semester	
<u>Learning courses of narrow sphere</u>												
Compulsory courses												
1.	ARCE 1141		Drawing	x								5
2.	ARCE 1142		Fine Arts I	x								5
3.	ARCE 1143		Introduction to Architecture	x								5
4.	ARCE 1241		History of Architecture		x							5
5.	ARCE 1242	ARCE 1142	Fine Arts II		x							5
6.	ARCE 1243	ARCE 1143	Fundamentals of Architectural Composition		x							5
7.	ARCE 1244	ARCE 1141	Computer Graphics AutoCAD for Architects		x							5
8.	ARCE 2141	ARCE 1243	Architectural Planning I			x						8
9.	ARCE 2142		Architectural Constructions I			x						5
10.	ARCE 2143		Computer Engineering Graphics ArchiCAD			x						5
11.	ARCE 2144	ARCE 1241	Contemporary Architecture			x						5
12.	ARCE 2145		Sustainable Architecture I			x						2
13.	ARCE 2241		Urban Planning I				x					5
14.	ARCE 2242	ARCE 2141	Architectural Planning II				x					8
15.	ARCE 2243	ARCE 2142	Architectural Constructions II				x					5
16.	ARCE 2244		Occupational Safety				x					5
17.	ARCE 2245	ARCE 2145	Sustainable Architecture II				x					2
18.	ARCE 3141	ARCE 2241	Urban Planning II					x				5
19.	ARCE 3142		Computer Graphics Revit Architecture I					x				5
20.	ARCE 3143	ARCE 2242	Architectural Planning III					x				8
21.	ARCE 3144	ARCE 2245	Sustainable Architecture III					x				2
22.	ARCE 3145		Interior 3D Modelling					x				5
23.	ARCE 3241		Safety of Buildings and Facilities						x			5

№	Course Code	Prerequisite	Course	Year								ECTS
				I		II		III		IV		
				I Semester	II Semester	III Semester	IV Semester	V Semester	VI Semester	VII Semester	VIII Semester	
24.	ARCE 3242	ARCE 3143	Architectural Planning IV						x			8
25.	ARCE 3243	ARCE 3141	Urban Planning III						x			5
26.	ARCE 3244		Interior Design I						x			5
27.	ARCE 3245	ARCE 3144	Sustainable Architecture IV						x			2
28.	ARCE 4141		Planning in Cultural Heritage							x		5
29.	ARCE 4142	ARCH 4141	Theory of Architectural Cultural Heritage							x		5
30.	ARCE 4143	ARCE 3243	Landscape Architecture							x		5
31.	ARCE 4144		Architecture of Tbilisi							x		5
32.	ARCE 4145		Architectural Design Management							x		5
33.	ARCE 4146	ARCE 3244	Interior Design II							x		5
34.	ARCE 4241		Professional Practice Management								x	5
35.	ARCE 4242		Architectural Project								x	20
Optional courses												
36.	ARCE 3146		Graphic Design for Architects									5
37.	ARCE 3147		Form-Making in Architecture									5
38.	ARCE 3246		Seminar on Sustainable Architecture							x		5
39.	ARCE 3247		Discourse Themes in Modern Architecture									5
40.	ARCE 3248	ARCE 3142	Computer Graphics Revit Architecture II									5
41.	ARCE 3249		Compositional Characteristics of Modern Architecture									5
Learning courses of free component												
Compulsory University courses												
42.	CIS 1140E		Computer Skills and Office Applications	x								5
43.	ACWR 0007E		Academic Writing		x							5
44.	ENGL 0009E		General English C1.0	x								5
45.	ENGL 0010E	ENGL 0009E	General English C1		x							5
46.	MATH 0003E		Calculus I	x								5

№	Course Code	Prerequisite	Course	Year								ECTS	
				I		II		III		IV			
				I Semester	II Semester	III Semester	IV Semester	V Semester	VI Semester	VII Semester	VIII Semester		
Optional University courses													
47.	HIST 0001E		Introduction to World History & Civilization									5	
48.	POLS 0002E		Political Science									5	
49.	HIST 0003E		History of Georgia									5	
50.	SOCI 0004E		Sociology			x						5	
51.	PHIL 0005E		Philosophy									5	
52.	PSYC 0006E		Psychology									5	
53.	GEO 0001		Georgian Language A1 ¹									5	
54.	GEO 0002	GEO 0001	Georgian Language A2									5	
55.	ENGF 0001		General English Language Skills B2.0+ ²	x								5	
56.	ENGF 0002	ENGF 0001	General English Language Skills B2+		x							5	
Free credits													
57.			Free Course ³						x			5	
ECTS				Per Semester	30	30	30	30	30	30	35	25	
				Per Year	60		60		60		60		
				Courses Per Year	12		12		12		8		

¹ In case a foreign student attests the level of general English language proficiency defined by the program (C1 Level), he / she will be exempted from passing English language courses and will study the courses in Georgian language within these credits, but if a student also is fluent in Georgian, he / she is entitled to study courses from the program's electives or free courses

² B2 + general English language courses will be taught to students with insufficient competence for C1 level according to the rules established at the university

³ Students can study the courses within the free credits from the elective courses provided by other undergraduate programs of the University and / or provided by the same program, taking into account their preconditions.