



საქართველოს ტექნიკური
უნივერსიტეტი
1922 წლიდან

Admission Prerequisites to the Program

Only a person holding a state certificate confirming complete general education, or a person equivalent to them, who is enrolled in accordance with the procedure established by the legislation of Georgia, has the right to study at the bachelor's level.

Program Objective

Objective 1: Using the fundamental theses of natural sciences and mathematics, to teach graduates modern approaches to managing civil engineering projects, identifying and solving engineering problems in the field, and the latest technical tools and technologies.

Objective 2: To understand the fundamental scientific issues of civil engineering, to train practicing and innovative engineers who, with appropriate theoretical knowledge and professional competencies, will be able to participate and contribute to the social, technical and business challenges in the field of civil engineering.

Objective 3: To provide graduates with a solid foundation for continuing their studies and constant professional development in the field of civil engineering.

Learning Outcomes/Competence (general and professional)

1. With extensive knowledge of the fundamental theories of engineering, natural sciences, and mathematics, critically understands theories and principles in the field;
2. Explains some of the most modern aspects of civil engineering, including planning, design, testing, and construction guidance for buildings and structures;
3. In the field of civil engineering, using cognitive and practical skills, standard and some of the latest methods, in compliance with ethical, labor and safety norms, solves such complex and unforeseen problems that meet the defining requirements of environmental protection, safety and well-being of the population;
4. Plans and conducts experiments in accordance with pre-defined guidelines, implements a practical project, analyzes and interprets data, uses them to formulate appropriate engineering assessments and conclusions;
5. Conducts clear and comprehensible communication with the audience, specialists and non-specialists in context-appropriate forms, using information and communication technologies, ideas related to the field, existing problems and ways to solve them;
6. Involved in interdisciplinary team activities, with members of which he/she creates a collaborative environment to perform the set tasks;
7. Plans continuous professional development, identifies his/her further learning needs and implements it with a high degree of independence.

Student Knowledge Assessment System

Grading system is based on a 100-point scale.

Positive grades:

- **(A)** - Excellent - grades between 91-100 points;
- **(B)** – Very good - grades between 81-90 points
- **(C)** - Good - grades between 71-80 points
- **(D)** - Satisfactory - grades between 61-70 points
- **(E)** - Pass - the rating of 51-60 points

Negative grades:

- **(FX)** - Did not pass - grades between 41-50 points, which means that the student is required to work more to pass and is given the right, after independent work, to take one extra exam;
- **(F)** – Failed - 40 points and less, which means that the work carried out by the student did not bring any results and he/she has to learn the subject from the beginning.

In the component of the educational program, in case of receiving FX, an additional exam is appointed, not less than 5 days after the announcement of the results. The number of points obtained in the final assessment is not added to the grade obtained by the student on the additional exam.

Detailed information is given at the following e-mail address: "Instruction for managing the educational process at the Georgian Technical University" <https://gtu.ge/Study-Dep/Forms/Forms.php>

Courses in the Program:

<i>N^o</i>	<i>Course</i>	<i>ECTS</i>
1.	Calculus C1	8
2.	General and Inorganic Chemistry A	8
3.	The Basics of Biology	6
4.	elective foreign language 1	
4.1.	English - 1	5
4.2.	Germany - 1	
4.3.	Franch - 1	
4.4.	Russian - 1	
5.	Elective Humanities Components:	
5.1.	History and Culture of Georgia	3
5.2.	Introduction to Philosophy	
5.3.	Sociology	
6.	Calculus C2	7
7.	General Physics 1A	7
8.	Special Course in the State Language	5
9.	Surveying for Civil Engineering	6

<i>Nº</i>	<i>Course</i>	<i>ECTS</i>
10.	elective foreign language 2	
10.1.	English - 2	5
10.2.	Germany - 2	
10.3.	Franch - 2	
10.4.	Russian - 2	
11.	Computer Engineers Graphics in Civil Engineering	5
12.	Introduction to Civil Engineering	3
13.	Calculus C3	8
14.	General Physics 2B	7
15.	Theoretical Mechanics (Statics)	5
16.	Statistical methods in Engineering	4
17.	elective foreign language 3	
17.1.	English - 3	5
17.2.	Germany - 3	
17.3.	Franch - 3	
17.4.	Russian - 3	
18.	elective foreign language 4	
18.1.	English - 4	5
18.2.	Germany - 4	
18.3.	Franch - 4	
18.4.	Russian - 4	
19.	Ordinary Differential Equations	5
20.	Theoretical Mechanics (Dynamics)	5
21.	Building Materials	5
22.	Strength of Materials	5
23.	The Principles of Economics	3
24.	Construction Methods	5
25.	Geotechnical Engineering	5
26.	Fluid Mechanics	5
27.	Geographic Information Systems	6
28.	Construction Machinery	3
29.	Basics of Structural Mechanics	6
30.	Environmental Engineering	6
31.	Construction of Transport Infrastructure	6
32.	Hydrology and Hydrometric	6
33.	Applied Hydraulics	6
34.	Design of Buildings with Reinforced Concrete Structures	6
35.	Elective courses in the field of basic education 1	
35.1.	Open Channel Hydraulics	6
35.2.	Foundation Base Engineering and Building Structure Deformation	

<i>Nº</i>	<i>Course</i>	<i>ECTS</i>
35.3.	Traffic Engineering	
36.	Elective courses in the field of basic education 2	
36.1.	Water Supply and Distribution Systems	6
36.2.	Construction of Hydraulics Structures	
36.3.	Highway's Engineering	
37.	Principles of Construction Estimating	4
38.	Principles of Construction Economics	4
39.	Bachelor's Practice	5
40.	Elective courses in the field of basic education 3	
40.1.	Water Treatment Engineering	6
40.2.	Steel Constructions	
40.3.	Design of Temporary Structures	
41.	Elective courses in the field of basic education 4	
41.1.	Wastewater Treatment Engineering	6
41.2.	Irrigation and Drainage	
41.3.	Railway Engineering	
42.	Elective courses in the field of basic education 5	
42.1.	Construction Project Management	6
42.2.	Solid and Hazardous Waste Engineering	
42.3.	Bridge Engineering	
43.	Safety Equipment on Construction Sites	4
44.	Bachelor's Project	8