

Admission Prerequisites to the Program:

Only the holder of a state certificate of complete general education or a person equal to him, who is enrolled in accordance with the rules established by the legislation of Georgia, has the right to study for a bachelor's degree.

- Citizens of Georgia will be enrolled based on the results of the United National Exams.
- International applicants will be enrolled in accordance with statement № 224 / N issued by the Ministry of Education, Science, Culture and Sports of Georgia on December 29, 2011.

It is obligatory to present a certificate / document proving English language proficiency at B2 level. To prove English language proficiency, the applicant must submit one of the following:

- a) Official international certificate: TOEFL, IELTS, Cambridge ESOL (English for Speakers of Other Languages), TELC (The European Language Certificates), Michigan (Cambridge Michigan);
- b) Proof of English language proficiency from high school, college or university, proving that the applicant was taught in English;
- c) Certificate issued by a local or international English language teaching provider confirming that B2 level of English has been achieved by the applicant through the relevant course.
- d) An applicant who fails to submit the above mentioned documents is required to pass a B2-level proficiency test in English at the GTU Computer Center.

Note: English language requirements can be waived if English is the native language of the applicant or if he / she has graduated from high school / university in a country where English is the official language and the applicant has studied English accordingly.

Program Objective:

Objective 1: Using the fundamental theses of the 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

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.

The grade obtained on the additional examination is the final grade and is reflected in the final grade of the educational program component.

In case of getting 0-50 points in the final grade of the educational component, or if the student does not exceed the minimum competency threshold in the final/additional exam, the student will be given a grade of F-0.

In each component, the program part of the assessment of the level of achievement of student learning outcomes consists of midterm assessment and final exam. Midterm assessment in turn includes ongoing activity and midterm exam.

Each form and component of the assessment determines its share of the final assessment from the total assessment score (100 points). In particular, the maximum score of the midterm assessment is not more than 60, and the maximum score of the final exam is not less than 40.

Each form of assessment includes an assessment component/component that includes the assessment method/methods, and the assessment method/methods is measured by the assessment criteria.

A student who has obtained at least a minimum positive grade in the intermediate assessment component (s) in accordance with the course curriculum (not less than 30 points in total), has completed and presented the minimum number of works specified in the program in the form of documentary material.

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

№	Learning Course	Credits
1.	Calculus C1 ABET 1	8
2.	General and Inorganic Chemistry A	7
3.	The Basics of Biology	6
4.	Oral communication	4
5.	Elective Humanitarian Components	
5.1.	History and Culture of Georgia	5
5.2.	Introduction to Philosophy	
5.3.	Sociology	
6.	Calculus C2 ABET2	7
7.	General Physics 1A	7
8.	Surveying for Civil Engineering	6
9.	Interpersonal Communication	5
10.	Computer Engineering Graphics in Civil Engineering	5
11.	Introduction to Civil Engineering	3
12.	Calculus C3 ABET3	7
13.	General Physics 2B	6
14.	Theoretical Mechanics (Statics)	5
15.	Statistical methods in construction	5
16.	Technical communication	4

17.	Business and Professional Communication	4
18.	Linear Algebra ABET	6
19.	Theoretical Mechanics (Dynamics)	5
20.	Introduction to the Building Materials	5
21.	Antitypy	5
22.	The Principles of Economics	5
23.	Construction Methods	5
24.	Geotechnical Engineering	5
25.	Fluid Mechanics	5
26.	Geographic Information Systems Fundamentals	6
27.	Construction machinery and equipment	3
28.	Basics of Structural Mechanics	6
29.	Introduction to Environmemtal Engineering	6
30.	Basis of the Construction of Transport Infrastructure	6
31.	Hydrology and Hydrometric	6
32.	Applied Hydraulics	6
33.	Design of Buildings with Reinforced Concrete Structures	6
34.	Elective courses in the field of basic education 1	
34.1.	Open Channel Hydraulics	6
34.2.	Foundation base Engineering and building structure deformation	
34.3.	Traffic Engineering Design	
35.	Elective courses in the field of basic education 2	
35.1.	Water Supply and Distribution Systems	6
35.2.	The basics of construction of hydraulic structures	
35.3.	Highway's Engineering	
36.	Free components	
36.1.	Democracy and Citizenship	5
36.2.	Construction contracts and state procurement organizing	
36.3.	Construction Project Management	
36.4.	Principles of marketing	
37.	Principles of Construction Estimating	5
38.	Principles of construction economics	4
39.	Preeliminary Project Practice	4
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.	Basics to Railway Construction	
42.	Safety Equipment on Construction	5
43.	Elective courses in the field of basic education 5	
43.1.	Construction Process Management	6
43.2.	Solid and Hazardous Waste Engineering	
43.3.	Ports and Marine Structures	
44.	Bachelor's project	7