Admission Prerequisite

Admission to a Bachelor's degree programme is open only to holders of a state certificate confirming complete general education or an equivalent document who are admitted in accordance with the procedure established by the legislation of Georgia.

Programme Objective

Objective 1: Graduates of the Civil Engineering programme will work successfully in professional fields related to civil engineering.

Objective 2: Graduates of the Civil Engineering programme will be specialists oriented towards practical civil engineering activities, effective collaborators and innovators who will lead or participate in efforts to address social, technical and business challenges.

Objective 3: Graduates of the Civil Engineering programme will recognise the need for continuous learning to practise civil engineering throughout their careers and will engage in lifelong learning and professional development through self-study, continuing education or Master's/doctoral and professional studies in engineering.

Learning Outcomes/Competences (General and Professional)

Outcome 1: An ability to identify, formulate and solve complex engineering problems by applying principles of engineering, natural sciences and mathematics.

Outcome 2: An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety and welfare, as well as global, cultural, social, environmental and economic factors.

Outcome 3: An ability to communicate effectively with a range of audiences.

Outcome 4: An ability to recognise ethical and professional responsibilities in engineering situations and make informed judgments, considering the impact of engineering solutions in global, economic, environmental and societal contexts.

Outcome 5: An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks and meet objectives.

Outcome 6: An ability to develop and conduct appropriate experiments, analyse and interpret data, and use engineering judgment to draw

conclusions.

Outcome 7: An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Student Knowledge Assessment System

Assessment is based on a 100-point scale.

Positive grades are:

- (A) - Excellent - 91-100 points;
- (B) - Very Good - 81-90 points;
- (C) - Good - 71-80 points;
- (D) - Satisfactory - 61-70 points;
- (E) - Sufficient - 51-60 points.

Negative grades are:

- (FX) - Did Not Pass - 41-50 points, meaning that the student needs more work to pass and is entitled to take one additional examination after independent study;
- (F) - Fail - 40 points or less, meaning that the work completed by the student is insufficient and the student must retake the course.

  If an FX grade is received in a component of the educational programme, an additional examination is scheduled no earlier than 5 days after the final examination results are announced. The grade obtained in the additional examination is not added to the score obtained in the final assessment. The additional examination grade constitutes the final assessment and is reflected in the final grade for the programme component. If the final grade for the educational component, taking the additional examination grade into account, is 0-50 points, or the student does not meet the minimum competence threshold in the final/additional examination, the student is assigned an F grade of 0 points.

  The programme-based assessment of the level of achievement of student learning outcomes in each component comprises an interim assessment and a final examination. The interim assessment includes ongoing activities and a mid-semester examination. Each assessment form and component is assigned a share of the total score (100 points) in the final assessment. Specifically, the maximum interim assessment score is no more than 60, while the maximum final examination score is no less than 40. Each assessment form includes assessment component(s), which include assessment method(s), measured by assessment criteria.

  A student may take the final examination if they have obtained at least the minimum positive grade in the interim assessment component(s) in accordance with the course syllabus (at least 30 points in total), and have completed and submitted on time the minimum required assignments in documentary form. Detailed information is available at the following electronic address:

Instruction on the Management of the Educational Process at Georgian Technical University
https://www.gtu.edu.ge/uploads/2026/03/educational-process2-1.pdf

Course	Credits
[Calculus C1]	[8]
[General and Inorganic Chemistry A]	[8]
[Fundamentals of Biology]	[6]
[English Language -1]	[5]
[German Language -1]	[5]
[French Language -1]	[5]
[Russian Language 1]	[5]
[Georgian History and Culture]	[3]
[Introduction to Philosophy]	[3]
[Sociology]	[3]
[Calculus C2]	[7]
[General Physics 1A]	[7]
[Special Course in the State Language]	[5]
[Surveying in Civil Engineering]	[6]
[English Language 2]	[5]
[German Language 2]	[5]
[French Language - 2]	[5]
[Russian Language 2]	[5]
[Computer Engineering Graphics in Civil Engineering]	[5]
[Introduction to Civil Engineering]	[3]
[Calculus C3]	[8]
[General Physics 2B]	[7]
[Theoretical Mechanics (Statics)]	[5]

[Statistical Methods in Engineering]	[4]
[English Language -3]	[5]
[German Language 3]	[5]
[French Language - 3]	[5]
[Russian Language 3]	[5]
[English Language- 4]	[5]
[German Language 4]	[5]
[French Language - 4]	[5]
[Russian Language 4]	[5]
[Ordinary Differential Equations]	[5]
[Theoretical Mechanics (Dynamics)]	[5]
[Building Materials]	[5]
[Strength of Materials]	[5]
[Principles of Economics]	[3]
[Construction Methods]	[5]
[Geotechnical Engineering]	[5]
[Fluid Mechanics]	[5]
[Geoinformation Systems]	[5]
[Construction Machinery]	[3]
[Fundamentals of Structural Mechanics]	[6]
[Environmental Engineering]	[6]
[Construction of Transport Infrastructure]	[6]
[Hydrology and Hydrometry]	[6]
[Applied Hydraulics]	[6]
[Design of Buildings and Structures with Reinforced Concrete Structures]	[6]
[Open Channel Hydraulics]	[6]

[Foundation Engineering and Deformation in Structures]	[6]
[Traffic Planning]	[6]
[Water Supply and Distribution Systems]	[6]
[Construction of Hydraulic Structures]	[6]
[Highway Engineering]	[6]
[Principles of Construction Cost Estimation]	[4]
[Principles of Construction Economics]	[4]
[Bachelor's Practice]	[5]
[Water Treatment Engineering]	[6]
[Metal Structures]	[6]
[Design of Temporary Structures]	[6]
[Wastewater Treatment Engineering]	[6]
[Irrigation and Drainage]	[6]
[Railway Engineering]	[6]
[Construction Project Management]	[6]
[Solid and Hazardous Waste Engineering]	[6]
[Bridge Engineering]	[6]
[Construction Safety]	[4]
[Bachelor's Project]	[8]
Total	[240]