Admission Prerequisites

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

• Citizens of Georgia are admitted on the basis of Unified National Examination results.

• International applicants are admitted in accordance with Order No. 224/n of 29 December 2011 of the Ministry of Education, Science, Culture and Sport of Georgia.

A certificate/document confirming Russian proficiency of at least B1 level is compulsory. To confirm Russian proficiency, an applicant must provide

one of the following documents:

a) TOEFL The (Test of Russian as a Foreign Language) Level II certification (corresponding to ALTE B1 level in the European testing system).

b) A document confirming Russian proficiency from a general education school, college or higher education institution, certifying that the applicant studied in Russian;

c) A certificate issued by a local or international language service provider confirming that the applicant has attained Russian proficiency of at least B1 level in the relevant course.

d) Applicants unable to provide the above documents must take a test at the GTU Testing Centre confirming Russian proficiency at B1 level.

Note. The requirement to provide a supporting document may be waived if the applicant's native language is Russian or they completed secondary school/university in a country where Russian is an official language and, consequently, studied in Russian.

Programme Objective

Objective 1.
Introduce graduates to methods of implementing basic construction technologies for erecting, installing and equipping public, commercial, industrial and residential structures; rules for selecting construction machinery needed for safe work; quality control of completed work; maintenance technologies for building structures; and the principal issues of construction organisation and management.

Objective 2.
On the basis of broad knowledge of civil engineering, enable graduates to implement practical construction projects in accordance with predetermined guidelines, considering requirements for environmental protection, safety and welfare and global, cultural, social, ecological and economic factors.

Objective 3.
Establish a solid foundation for graduates to continue studies at the next level and pursue continuous professional development so that, through the education acquired,

they contribute to the uninterrupted functioning of the construction sector.

Learning Outcomes/Competence (General and Professional)

1. On the basis of broad knowledge of construction, critically discusses theories and principles in the field.

2. Explains certain advanced aspects of construction engineering, including technologies and methods for installing, erecting and servicing public, commercial, industrial and residential structures (and their equipment), as well as technologies and methods for their installation, construction and operation;

3. Uses standard and certain advanced methods of cognitive and practical skills to solve complex and unforeseen problems in civil engineering that meet requirements for environmental protection, public safety and welfare, considering global, cultural, social, ecological and economic factors.

4. Plans and conducts an experiment in accordance with predetermined principles; implements a practical project using standard and certain advanced methods; interprets the analysis of the data obtained using professional judgement; and draws appropriate conclusions.

5. Observing ethical, occupational and safety standards, selects construction materials, technologies and construction methods, and participates in construction processes, installation of structural elements, erection and equipping of buildings, and construction quality control, assessment and technical examination.

6. Communicates clearly and intelligibly with specialist and non-specialist audiences about ideas, existing problems and ways to solve them in the field, in the appropriate context and using information and communication technologies.

7. Participates in development-oriented teamwork with personal responsibility and observance of work ethics, creates a collaborative environment with team members and accomplishes the assigned task.

8. Plans continuous professional development, identifies further learning needs and pursues them independently at a high level.

Student Knowledge Assessment System

Assessment is based on a 100-point scale.

Positive grades:

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

Negative grades:

- (FX) - Did Not Pass - assessed at 41-50 points, meaning that the student needs more work to pass and is given the opportunity, through independent

study, to take the examination once more;

(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 results are announced. The score obtained in the final assessment is not added to the grade obtained in the additional examination. 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 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
[Foreign Language (English) - A1.1]	[5]
[Foreign Language (German) - A1.1]	
[1 Foreign Language (French) - A1.1]	
[Foreign Language (English) - A1.1]	
[Engineering Mathematics 1]	[5]
[Physics 1]	[4]
[General Chemistry]	[4]
[Fundamentals of Programming in Construction]	[4]

[Geodesy 1]	[3]
[History of Georgia]	3
[Fundamentals of Philosophy]	
[Modern Technologies of Language Communication]	
[Elements of Academic Writing]	
[Introduction to Sociology]	
[Introduction to Psychology]	
[History of Technical Design]	
[Descriptive Geometry]	[3]
[Construction Drawing]	[3]
[Foreign Language (English) - A1.2]	[5]
[Foreign Language (German) - A1.2]	
[Foreign Language (French) - A1.2]	
[Geodesy 2]	[3]
[Engineering Mathematics 2]	[5]
[Physics 2]	[4]
[Theoretical Mechanics - Statics]	[5]
[Engineering Geology and Soil Mechanics]	[4]
[Environmental Protection and Ecology]	[3]
[Foundation Soils and Foundations]	[3]
[Computer Engineering Graphics]	[3]
[Theoretical Mechanics - Dynamics]	[5]
[Strength of Materials 1]	[4]
[Engineering Mathematics 3]	[5]
[Construction Materials 1]	[3]
[Introduction to Construction]	[3]

[Strength of Materials 2]	[4]
[Hydraulics]	[5]
[Construction Materials 2]	[3]
[Heat and Gas Supply and Ventilation]	[5]
[Structural Mechanics]	[5]
[Statistical Methods in Construction]	[4]
[Construction Machinery and Equipment]	[5]
[Water Supply and Wastewater Disposal]	[5
[Fundamentals of Construction Production]	[5]
[Water Intake Structures]	[5]
[Building Structures]	[5]
[Fundamentals of Occupational Safety in Construction]	[4]
[Fundamentals of Hydraulic Engineering Construction]	[5]
[Architecture of Buildings and Structures]	[3]
[Fundamentals of Construction Management]	[5]
[Seismic Resistance of Structures]	[5]
[Sanitary Engineering Equipment of Buildings]	[5]
[Construction Technical Examination]	[5]
[Technology of Erecting Buildings and Structures]	[5]
[Construction Tenders, Ethics and Contracts]	[3]
[Construction Production Technology]	[5]
[Metal Structures]	[5]
[Design of Buildings and Structures with Reinforced Concrete Structures]	[5]
[Timber and Plastic Structures]	[5]
[Water Supply of Settlements]	[5]
[Water Chemistry and Microbiology]	[5]

[Pumps and Pumping Stations]	[5]
[Wastewater Systems of Settlements]	[5]
[Hydraulics of Structures]	[5]
[Execution of Hydraulic Engineering Work]	[5]
[Hydraulic Structures]	[5]
[Hydrology and Hydrometry]	[5]
[Investigation and Testing of Buildings and Structures]	[5]
[Restoration and Strengthening of Buildings and Structures]	[5]
[Industrial and Agricultural Water Supply]	[5]
[Operation of Water Supply and Sewerage Systems]	[5]
[Hydroelectric Power Stations]	[5]
[Engineering Land Reclamation]	[5]
[Pre-Bachelor's Practice]	[5]
[Bachelor's thesis]	[5]
[Diagnostics of Structural Damage]	[5]
[Construction Economics]	[5]
[Construction Computer Programs]	[5]
[Hydrogeology]	[5]
[Water Ecology]	[5]
[Fundamentals of Special-Purpose Building Design]	[5]
[Hydraulic Structures of Waterways and Ports]	[5]
[Underground Hydraulic Structures]	[5]
[History of Railway Construction]	[3]
[History of Metro Construction]	[3]
[History of Road Construction]	[4]
[History of the Development of Engineered Structures]	[4]

[History of the Earth]	[3]
[Green Construction]	[4]
Total	[240]