Admission Prerequisites

The right to study in the doctoral educational programme is granted to a person who holds a Master's degree or an equivalent academic degree in one of the following detailed fields of the Classifier of Fields of Study: 1031 "Military Science and Defence", 1032.1.1 Emergency Management, 0732 Building and Civil Engineering.

A candidate wishing to enrol in the programme must submit:

1. A research project outlining the applicant's research aim and direction;
2. A relevant international certificate confirming knowledge of English at no lower than B2 level, or successfully pass a B2-level English language test organised and administered by GTU. A candidate who has completed a recognised English-language educational programme at any level of higher education is not required to pass the examination or present a certificate (completion of an English-language programme is confirmed by the relevant qualification document, i.e. a diploma);
3. Document(s) confirming previous work/publications in the relevant field and/or participation in scientific research projects and events and/or at least 2 years of work experience in the relevant field;
4. Other documentation/information predetermined by the University on the basis of the Regulations on Doctoral Studies of the LEPL Georgian Technical University.

A candidate whose submitted documentation fully meets the formal requirements is interviewed by the Temporary Faculty Commission. In accordance with the procedure established by the legal acts of GTU, the Temporary Faculty Commission ensures the assessment of persons wishing to be admitted to the programme in compliance with the principles of objectivity, fairness and transparency. Consideration is given to the assessment of the candidate's experience and abilities necessary for the successful completion of the doctoral educational programme, including (where available) the candidate's scientific publications, experience of participation in scientific conferences, and other documents and materials related to teaching/research activities (certificates, diplomas, patents, etc.).

Full information on the rules of admission to doctoral studies and the conditions of enrolment, as well as sample(s) of the English language examination tests, is available on the official website of the University: https://gtu.ge/apply/phd.php/

Enrolment in the programme through mobility is possible twice a year, within the time frames set by the Ministry of Education, Science and Youth of Georgia, in compliance with the conditions and rules defined by the legislation of Georgia and the legal acts of GTU.

Enrolment in the programme from a recognised higher education institution of a foreign country is carried out in accordance with the procedure established by the legislation of Georgia.

Programme Goal

The goal of the educational programme is:

Goal 1: To prepare a highly qualified researcher in the field of military science who is able to carry out independent, original and innovative research in the field of military engineering, to create new scientific knowledge and develop existing knowledge, using the methods, approaches and technological capabilities of the engineering (construction) sciences in the process of researching and solving military problems.

Goal 2: To develop the doctoral student's ability to understand the modern defence environment, armed combat, military strategy, operational art and tactics systematically and critically, so that they are able to

identify existing and new problems in the field of military engineering, research them scientifically and determine appropriate engineering approaches and capabilities for solving them.

Goal 3: To prepare a researcher who is able to conduct scientific research into the engineering support of military operations, military engineering capabilities, military infrastructure, engineering security and protection, military engineering technologies, and the military aspects of national resilience and civil defence, and to develop new models, methodological approaches and engineering solutions for solving military tasks.

Goal 4: To develop the doctoral student's ability to critically evaluate, scientifically substantiate, disseminate and apply in practice the research results and new knowledge obtained in the field of military science, as well as the ability to communicate with the international academic and professional community in compliance with the principles of academic and professional integrity.

Learning Outcomes/Competences (General and Professional)

1. **Knowledge and Understanding**

1.1 Possesses systematic and in-depth knowledge based on the latest achievements of military science; critically understands the modern theories, concepts and methodological foundations of research in military science, the development trends of the defence environment and armed combat, and the interrelationship between military strategy, operational art and tactics.

1.2 Systematically and critically understands the modern theoretical and practical problems of military engineering, the development of military engineering capabilities, the engineering preparation of territory for defence, the military engineering support of combat actions and operations, and the military aspects of military infrastructure, engineering security and protection, modern military engineering technologies, national resilience and civil defence.

1.3 Possesses and critically understands the relevant modern knowledge, methods and technological approaches of the engineering sciences as the scientific basis for researching military engineering problems, solving military tasks and creating new military engineering knowledge.

2. **Skills**

2.1 Independently identifies a topical scientific problem in the field of military engineering, formulates research aims and objectives, selects and develops an appropriate research methodology, and carries out original research aimed at creating new military engineering knowledge and developing existing knowledge.

2.2 Through the integrated use of modern concepts of military science and relevant methods of the engineering sciences, analyses complex military engineering problems, critically evaluates alternative solutions, and develops new models, methods and engineering solutions for the effective resolution of military tasks.

2.3 Taking into account the modern security environment and military threats, independently plans, evaluates and scientifically substantiates the decisions required for the development of military engineering capabilities, the engineering preparation of territory for defence, the engineering support of military operations, military infrastructure and engineering protection.

2.4 Carries out critical analysis, synthesis and scientific interpretation of the data and new knowledge obtained as a result of research; on the basis of the results obtained, formulates well-founded conclusions, recommendations and opportunities for the development of new research directions.

2.5 Presents and substantiates the new knowledge and research results created in the field of military engineering to the national and international scientific and professional community in compliance with academic standards, participates in scientific discussion and disseminates research results.

3. **Responsibility and Autonomy**

3.1 Independently plans, organises and conducts the scientific research process in the field of military engineering, takes responsibility for defining research aims, methodological approaches and decisions, and contributes to the development of new knowledge and research directions.

3.2 When researching and solving complex and non-standard problems in the field of military engineering, independently makes scientifically substantiated decisions, evaluates their possible consequences, and responsibly applies the knowledge and methods of the engineering (construction) sciences to solve military tasks.

3.3 Taking into account academic and professional integrity, ethical responsibility and the interests of national security, creates, develops and disseminates new knowledge in the field of military science and military engineering, and promotes its application in the academic and professional environment.

Student Knowledge Assessment System

Student performance in the study courses defined by the programme is assessed in accordance with the assessment system approved by Order No. 3 of the Minister of Education and Science of Georgia of 5 January 2007 "On the Procedure for Calculating Higher Education Programmes with Credits".

Assessment of the study component:

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, which means that the student needs more work to pass and is given the right to sit an additional examination once after independent work;

(F) – Failed – 40 points or less, which means that the work carried out by the student is not sufficient and the subject must be studied anew.

The scientific research component of the doctoral educational programme is assessed once, by a final assessment. The rules for assessing the study and research components of doctoral educational programmes are available at the link:
https://www.gtu.edu.ge/uploads/2026/03/edu-research-components.pdf

Subject	**Credits**
Scientific Communication Techniques	4
Teaching Methods	6

Structure, Essence and Research Methods of Military Science	5
Theoretical Foundations of Military Engineering Science and Its Role in the Modern Defence System	5
Course in Building Construction for the Military	5
Engineering Preparation of Territory for Defence and Military Engineering Support of Combat Actions and Operations	5
Geopolitics and National Security	5
Military Strategy and Operational Art	5
Professor's Assistantship	10
Specialised courses related to the doctoral programme (elective course block)	**10**
Total	**60**
Specialised courses related to the doctoral programme (elective course block)	
Defence Environment and Armed Combat	5
Modern Construction Methods in Road Infrastructure	5
Management Methods for Innovative Construction Projects	5
Modern Methods of Construction and Technical Expertise	5
Design of Scientific Experiments and Statistical Analysis	5
Structural, Compositional and Technological Features in Construction	5