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.

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://www.gtu.edu.ge/migheba/programebi/migheba-saphekhurebis-mikhedvith/doqtorantura/doqtorantura-migheba/

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 programme is:

- To develop knowledge based on the latest achievements in the field of energy and electrical engineering and to gain a new understanding of the challenges existing in the field.
- To prepare researchers capable of independently conducting scientific research and pedagogical activities in compliance with the principles of academic and professional integrity, oriented towards expanding existing knowledge in the field and implementing innovative research projects, as well as making a significant contribution to the development of the field by offering new technological opportunities.

Learning Outcomes/Competences (General and Professional)

- Has knowledge based on the latest achievements in the field of energy and electrical engineering which, through a systematic and critical understanding of the field of study and/or activity, enables the expansion of existing knowledge in an interdisciplinary context;
- Using modern research methods and approaches oriented towards the creation of new knowledge, and in compliance with the principles of academic integrity, independently plans and conducts research in the field of the generation, transmission, distribution and consumption of electrical and thermal energy;
- As a result of the critical analysis and evaluation of new, complex and contradictory views related to the large-scale use of alternative energy sources and the practical implementation of energy-efficient technologies, independently makes complex and effective decisions;
- In relation to existing theories and concepts in the field of energy and electrical engineering, clearly formulates their own research results/views for colleagues and the wider public, in compliance with the high standards of international peer-reviewed publications and through appropriate participation in thematic discussions held at international level, as well as in the course of academic activities oriented towards the transfer of knowledge;
- In compliance with the principles of academic and supervisory integrity, independently implements innovative research projects based on the latest technological achievements in the field of energy and electrical engineering;
- In accordance with internationally recognised standards in the field and using new analytical approaches, develops and implements/advances modern technologies and techniques for the installation, maintenance, repair and fault diagnosis of electrical wiring and electrical equipment in the industrial, commercial and residential sectors.

Student Knowledge Assessment System

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.

Assessment of the scientific research component/components:

a) Excellent (summa cum laude) – an outstanding piece of work;

b) Very good (magna cum laude) – a result that exceeds the set requirements in every respect;

c) Good (cum laude) – a result that exceeds the set requirements;

d) Average (bene) – a piece of work of average level that meets the basic set requirements;

e) Satisfactory (rite) – a result that, despite shortcomings, still meets the set requirements;

f) Unsatisfactory (insufficient) – a piece of work of unsatisfactory level that does not meet the set requirements due to significant shortcomings;

g) Completely unsatisfactory (sub omni canone) – a result that completely fails to meet the set requirements.

Detailed information on the rules for the assessment of the study and research components of the doctoral educational programme is available at the link:

https://www.gtu.edu.ge/uploads/2026/03/edu-research-components.pdf

The research component of the doctoral educational programme is assessed once, by a final assessment.

Subject	Credits
Compulsory Study Courses	
Scientific Communication Techniques	4
Research Methods in Energy and Electrical Engineering	10
Teaching Methods and Education Management	6
Energy Security – Electric Power Engineering	5
Sustainable Energy and Climate Change	5
Professor's Assistantship	5
Thematic Seminar	10
Compulsory Elective Study Courses	**10**
Modern Technologies for the Generation of Electrical and Thermal Energy	10
Optimisation of Power System Development	
Features and Principles of Energy Management	
Modern Electrical Machines and Apparatus of Electric Power Systems	
Energy Efficiency Assurance Systems and Electromagnetic Compatibility	
Programming of Embedded Systems of Electric Power Facilities	
Energy Security – Oil and Gas	
Total Study Component	**55**
Research Component	**–**