



Master's Educational Program

Program Title

ლოგისტიკა

Logistics

Faculty

სატრანსპორტო სისტემებისა და მექანიკის ინჟინერიის ფაკულტეტი

Faculty of Transport Systems and Mechanics Engineering

Program Head/Heads

Professor Rezo TEDORADZE

Qualification to be Awarded and the Extent of the Program in terms of Credits

Master of Engineering Logistics

Will be awarded upon completion of at least 120 credits of the educational program

Language of Teaching

Georgian

Prerequisite for Admission to the Program

A person with at least a bachelor's degree or an academic degree equivalent to it, who is enrolled based on the results of the master's exams, according to the rules established by the Georgian legislation, has the right to study in the master's program (general master's exam and specialty exam/exams determined by GTU). Exam questions/tests will be posted on the GTU website at least one month before the commencement of the specialty exams.

The applicant must have a certificate confirming knowledge of the English language of at least B2

level, or must present a document of completion of a corresponding training course of B2 level. In the absence of a similar certificate or other similar document, the applicant will be tested in the English language at the exam center of GTU.

Enrollment in the program without passing the master's exams is possible according to the rules established by the Ministry of Education, Science, Culture and Sports of Georgia.

Program Description

The educational program "Logistics" was created based on the specifics and innovations of the field, based on the experience of a foreign university, and taking into account the requirements of the labor market.

The program is implemented in partnership with European partner universities within the framework of the Erasmus+ K2 program. Four European universities, six Ukrainian universities and Batumi Maritime Academy participate in the project. The head of the project consortium is the University of Rome Tor Vergata (Italy). A grant agreement (N: 2893/001-001) was signed between the Georgian Technical University and the consortium in 2017. The project envisages the introduction of a joint master's educational program in "Logistics" (Smart Logistics). The program envisages the mobility of master's students in the 2nd and 4th semesters in Italian and German universities.

The program is based on the European Credit Transfer System (ECTS), 1 credit is 25 hours, which includes both contact and independent work hours. The program lasts 2 years (4 semesters) and includes 120 credits.

The program ensures the achievement of the program objectives and the results required for the main qualification by describing the seventh level (Master's) of the Higher Education Qualifications Framework.

- 10 credits of the educational component of the first year of education are given to foreign language (English) educational courses. 44 credits for specialty education courses, 6 credits for elective courses related to the specialty;

- 30 credits of the second year educational component are given to education courses related to the specialty, including 6 credits to internship. 30 credits for the research component - completion and defense of the master's thesis.

Program Objective

The objective of the program is to prepare Masters equipped with deep knowledge, critical analysis, practical and research skills in the field of engineering logistics, who will have:

Objective 1. Appropriate knowledge of international market requirements to solve tasks and problems in the field of engineering;

Objective 2. Effective and optimal management decisions in the supply chain using modern technologies;

Objective 3. Contributions to the development of the field by solving practical tasks in the operation of technological devices, transport and warehouse systems and service systems in smart logistics.

Learning Outcomes/Competences (general and professional)

- Argumentatively **formulates** the conclusions and the significance of the research, writing communication with the academic or professional society in Georgian and foreign languages;
- **Evaluates** software capabilities in the process of managing transport systems using various simulations and parameters to obtain optimal results;
- **Analyzes** the volume and direction of operational freight shipments for the solution of problematic issues on urban transport with a systematic approach;
- **Plans** the transport network according to their differentiated requirements, types of transport and routes using the latest methods and approaches;
- **Solves** problems in the supply chain using appropriate measures and modern management system principles and tools;
- **Formalizes** issues of ecological processes and transport infrastructure strategy development and its implementation;
- **Contemplates** the volume of works to be carried out in accordance with the main characteristics of the load and management of transport systems in conflict areas;
- **Assesses** the need for further education, is able to conduct professional activities independently;
- **Consults** with specialists in the field of engineering logistics to find alternative ways and solve existing problems.

Methods of achieving learning outcomes (teaching-learning)

- Lecture Seminar (group work) Practical Laboratory Practice
- Course work/Project Master's Thesis Consultation Independent work

In the educational process, depending on the specifics of the specific educational course program, the following activities of teaching-learning methods are used, which are reflected in the relevant course programs (syllabi): Demonstration; verbal or oral; written work; explanatory; discussion/debates; case study; project development and presentation; synthesis; analysis.

Student's Knowledge Assessment System

The student's knowledge is assessed 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) - Failed to pass – 41-50 points, which means that the student needs more work to pass and is allowed to take an additional exam once with independent work;
- (F) - Failed - 40 points or less, which means that the work done by the student is insufficient and he/she will have to study the subject again.

Fields of Employment

Graduates will be able to find employment in transport and logistics companies; In infrastructure management companies: ports, intermodal terminals, logistics centers, warehouses, trading companies, and other types of organizations that purchase or create transportation and logistics services.

Opportunities for continuing education

PhD educational programs

Human and material resources needed to implement the program

The program is provided with adequate human and material resources. For additional information, please find the attached documentation

Number of attached syllabi: 19