საქართველოს ტექნიკური უნივერსიტეტი
GEORGIAN TECHNICAL UNIVERSITY

Approved by
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Bachelor's Educational Program

Program Title

ტრანსპორტი
Transport

Faculty

სატრანსპორტო სისტემებისა და მექანიკის ინჟინერიის ფაკულტეტი
Faculty of Transport Systems and Mechanics Engineering

Program Head/Heads

Professor Giorgi ABRAMISHVILI

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

Bachelor of Transport Engineering *The bachelor's qualification will be awarded by combining at least 228 credits of education courses and 12 credits of free components. if at least 240 credits are completed*

Language of Teaching

Georgian

Prerequisite for Admission to the Program

Only the person with a state certificate confirming complete general education or a document equivalent to it, has the right to study at the bachelor's level who will be enrolled in accordance with the procedure established by the legislation of Georgia.

Program Description

The Bachelor's educational program "Transport" is created taking into account the specifics of the field and the requirements of the labor market. The program is compiled by the European Credit Transfer System (ECTS), 1 credit is equal to 25 hours, which includes both contact and independent work hours. The distribution of credits is presented in the curriculum.

A student to be awarded a Bachelor of Transport Engineering degree must accumulate at least 240 credits, which will ensure the achievement of the program objectives and the results required for the main qualification at the Bachelor's level descriptor level of the Higher Education Qualifications Framework.

The educational program consists of education courses (228 credits) and free components (12 credits) corresponding to the main field of study. Courses of content corresponding to the main field of study are presented in the form of compulsory and elective courses: compulsory courses - 192 credits, internship- 6 credits, two elective concentrations (motor transport, railway transport) - 30 credits each, including a Bachelor's Thesis.

The student chooses a free component from the courses/subjects/modules available within the educational program of the first level of higher education in order to broaden his/her horizons in the fields (issues) of interest to him/her.

The information on the organization of the educational process, assessment of student achievements, educational and financial agreements with students, and the accumulation of credits by students, given in the instructions for managing the educational process at the Georgian Technical University, is available on the following website.

Program Objective

Objective 1: To prepare a specialist equipped with broad theoretical knowledge and practical skills in the field of transport to participate in the process of diagnosing faults in ground vehicles (motor, railway);
Objective 2: To provide the graduate with the skills to manage ground vehicles maintenance, repair and service works, in accordance with established procedures and instructions, taking into account the principles of labor, traffic and environmental safety;
Objective 3: Taking into account the priority of transport in the country and the requirements of the labor market, to create a solid foundation for the graduate to continue to the next level of education and continuous professional development.

Learning Outcomes/Competences (general and professional)

1. **Describes** the technical means necessary for diagnosing, maintaining, repairing and servicing the faults of modern road and railway vehicles;
2. In accordance with the instructions, **handles** individual organizational and technical tasks for the diagnosis, repair and service of complex and unforeseen problems of automobile and railway vehicles;
3. In accordance with the predetermined instructions**, implements** the technological design of transport facilities, taking into account the rules of labor safety;
4. **Determines** the technical condition of motor and rail vehicles using standard and some of the latest methods;
5. Creatively **uses** technological means of information and communication with specialists and non-specialists to discuss existing problematic issues and search for solutions;
6. **Determines** the possibility of continuing educational process and constant professional development.

Learning Outcomes/Competences (Motor vehicles concentration)

1.**Discusses** the constructions of modern motor vehicles, the working principles of their mechanisms and systems;

2. **Reveals** faults of motor vehicles using modern diagnostic methods;
3. **Plans** the technical service and current repair works of motor vehicles in accordance with the supervisor's instructions;
4. **Analyzes** current issues of motor vehicle safety;
5. By using existing methods, **solves** the practical tasks of identifying and eliminating faults in motor vehicles.

Learning Outcomes/Competences (Railway vehicles concentration)

1.**Discusses** the constructions of modern railway vehicles, the working principles of their mechanisms and systems;
2. **Reveals** faults of railway vehicles using modern diagnostic methods;
3. **Plans** the technical service and current repair works of railway vehicles in accordance with the supervisor's instructions;
4. **Analyzes** current issues of railway vehicle safety;
5. By using existing methods, **solves** the practical tasks of identifying and eliminating faults in railway vehicles.

Methods of achieving learning outcomes (teaching-learning)

☒ Lecture ☒Seminar (group work)☒ Practical ☒ Laboratory ☒Practice
☒ Course work/Project ☒ Consultation ☒ Independent work

In the educational process, depending on the specifics of a particular study course program, the following teaching-learning methods are used, which are given in the relevant education course programs (syllabi): Discussion/debates; group (collaborative) work; heuristic; case study; demonstration; verbal or oral; explanatory; action-oriented learning; project development and presentation.

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 - 41-50 assessment points, which means that the student needs more work to pass and is allowed to take the additional exam once with independent work;
- **(F)** - Failed - 40 evaluation points and less, which means that the work done by the student is not enough and he/she has to study the subject again.

In case of receiving FX in the component of the educational program, GTU will schedule an additional exam at least 5 days after the announcement of the results of the final exam. The number of points obtained in the final assessment is not added to the grade received by the student at the additional exam.

The grade obtained at the additional exam is the final grade and is reflected in the final grade of the educational program component. In case of receiving 0-50 points in the final evaluation of the educational component, taking into account the evaluation received at the additional exam, the student will be assigned an F-0 score.

The right to pass the final exam is granted to a student who passed the minimum competence limit (scored at least 30 points) in the intermediate assessment. The dates of the mid-semester exam and final/supplementary exams will be specified in the Rector's order on the semester schedule.

Fields of Employment

State/municipal and private transport organizations: JSC "Georgian Railways" enterprises/institutions (railway stations and terminals; locomotive and wagon depots; railway automation and telemechanics line facilities); urban electric transport (including metro) rolling stock operating areas; JSC Electric power plant; LTD Electro Car Repar Works; LTD “Carriage-Building Company” in Rustavi; enterprises/institutions related to the operation of motor vehicles (providing technical condition of cars, traffic and environmental safety, periodic technical inspections, passenger transportation, cargo transportation); freight-forwarding centers, industry associations and other organizations where a Bachelor of Transport Engineering with appropriate qualifications will be able to work.

Opportunities for continuing education

Master's degree educational programs

Human and material resources needed to implement the program

The program is provided with appropriate human and material resources. Detailed information is provided in the attached documentation.

Number of attached syllabi: 96