



Faculty of Civil Engineering

Catalogue of Professional Educational Programs

2018

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Professional Educational Program

Technician of Lifting Transport Vehicles And Elevators

Credits assigned to the program (ECTS)

30

Awarded Qualification

The Third Level Professional Qualification of Lifting Transport Vehicles And Elevators Technician

The language of Study

Georgian

The Purpose of the Educational Program

The program aims to prepare the third level Lifting Transport Vehicles And Elevators Technician who can:

- Independently manage lifting transport machines and mechanisms, to serve them, to perform a medium-sized repair work.
- Under the supervision of experienced specialists dismantling, repair and build lifting transport vehicles and mechanisms working bodies, basic knots and mechanisms.
- Independently perform the installation and rendering of separate nodes of passenger, freight and passenger-load lifts.

- Under the supervision of experienced specialists to perform these lifts electrical equipment installation and adjustment.
- Independently serve the above mentioned elevators in the process of exploitation.

Educational Program study result

Knowledge and Understanding:

Has the general knowledge of the sphere of the field and understands the necessary steps to perform simple tasks.

Has specialty correspondence of machinery and structural design knowledge nodes. Special measuring instruments, tools, appliances and the use of their knowledge.

Knowledge of general norms and requirements of labor protection and safety.

Ability to use Acquired Knowledge and Skills in Practice :

Can perform simple and homogeneous tasks under the direct management of the structured environment using the basic materials and tools.

Can independently perform production assignments using basic materials and tools. Special measuring instruments and devices for use.

Protection of general norms and requirements of labor protection and safety.

Conclusion-Making Skills :

Recognizing the simple problems identified in the working process, taking into account the guidance of the manager.

Can utilize existing information sources, evaluate and analyze information to solve the problems arising in different situations

Communication Skills:

Can Oral and written communication on simple issues related to the profession. Holds the information and communication technologies.

Is able to have oral and written communication on professional matters in different situations.

Effectively utilizes information and communication technologies related to professional activities.

Practical use of foreign language in professional activities.

Learning Skills :

Can learn under supervision.

Can take responsibility for her /his studies within the pre-defined tasks, acquire, analyze and share professional information.

Values:

Is familiar with the values of professional activity.

Protects technical norms in the fields of mechanics, professional ethics norms. Knows and protects the safety rules. Have a sense of responsibility.

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Professional Educational Program	
Construction Builder	
	Credits assigned to the program (ECTS)
	60
	Awarded Qualification
	The Fourth Level Professional Qualification of the Construction Builder
	The Language of Study
	Georgian

The Purpose of the Educational Program

To teach students theoretically and to acquire practical skills in the following areas: Basics of Business; Basics of Construction Business; Business resources and factors; Business planning and entrepreneurial environment; Organization planning, structure and communication; Material and human resources necessary for the general needs of the small and medium construction business development. Identification of building constructive elements, changing the working process on the construction site according to the need; Examination of the documents asserting the quality of the materials and the quality of the materials presented in respect of the design data. Control of the group, brigade management and security norms involved in the working process.

Educational Program study result

Knowledge and Understanding

Have knowledge based on factual circumstances and theoretical foundations, realizing general possibilities for solving problems.

Knows:

- Business Mathematics, Business-Communications, Computer Technologies, English Language Basic Course Program;
- Basics of Constructon Business, Business Environment, Business Resources and Factors, Construction Business Planning and Entrepreneurial Environment;
- Organizational culture of Construction enterprises , organization planning, structure and communication;
- Career Management, Organization Development, Professional, Personal and Communicative Skills, Production of Business

Documents Required for Building Business, Office Applications, the Use of Internet, Use of e-mail;

- Specifics of use and warehousing of construction materials, inventory and constructive elements on the construction site;
- Types of constructive elements, determination and comparison of constructive element benchmarking measures on the construction site;
- Viewing the ground with simple device tools, determining the length of the construction processes and the required number of workers, realizes the importance of the construction norms data.

Ability to use Acquired Knowledge and Skills in Practice :

The ability to use appropriate sources of information in planning and execution of the work, to develop a strategy to overcome the specific task raised and evaluate the results obtained to improve the work done.

Is able to:

- Define and build functional attitudes, analyze and use the results for the purpose.
- Use the knowledge of business basics and the principles of small construction business for planning small scale works.
- Planning and developing business relationships based on the specific nature of the manufacturing processes in the construction business.
- Facilitate the development and formation of a favorable business environment, develop qualified business communications with partners and colleagues.
- Marketing provision of Entrepreneurial activity;

- Plan the human resources and personal career participation in the manufacturing process and take care of the development.
- Take into consideration the peculiarities of the construction business in relation to this process, to create a database of planned and future construction works.
- Determine the shape of the foundation, its surface area and depth.
- Comparison-verification of documents supplied by the materials provided and the quality of goods.
- Control of the group, brigade management and safety norms involved in works processes.

Conclusion-Making Skills :

Can develop appropriate approach to solve the specific problems, review alternative opportunities and analyze the outcome results.

Has:

- Ability to find professional analysis and conclusions for solving problems related to construction business and general decision making;
- Ability to define and set personal goals based on autonomous thinking and situational analysis in practical construction activities;
- Ability to determine the terms of development of the entrepreneurial project;
- Ability to determine the material needs and human resources necessary for the implementation of the general needs of small and

medium-sized business development;

- Can change the characteristics of the permissible material by the construction norms based on the results of the theoretical calculations carried out by him, to prove and make a conclusion and present his vision as an account or information.

Communication Skills :

Can provide oral and written communications in professional situations related to the variable situations, independently acquiring new information and communication technologies, processing information related to the profession of foreign language.

Is able to:

- For the continuous conduction of the construction process in different situations, use of modern information and communication technologies;
- During the professional activities communicate orally and in writing in native and English languages.

Learning Skills

It is possible to determine the direction of their studies independently, but partially in changing circumstances.

Is able to:

- Determining the direction of further development of his professional knowledge;
- Getting the latest information, studying materials, technologies, understanding, identifying, modifying, sharing, critical analysis

and argumentative justification.

Values

Responsible for the value of the professional activity and to act accordingly in changing situations.

Is able to:

- Establish business attitudes with managers and colleagues;
- Ability to take personal responsibility in the common case.
- Have a sense of respect toward colleagues and partners' opinions;
- A sense of responsibility toward professional activities
- Operation in accordance with the norms and rules, within the framework of professional ethics, to create an environment with a safe and sustainable development.

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Gypsum Cardboard Specialist

Credits assigned to the program (ECTS)

30

Awarded Qualification

The third Level Professional Qualification of Gypsum Cardboard Specialist

The language of Study

Georgian

The Purpose of the Educational Program

The program aims to prepare a third level Gypsum Cardboard Specialist, which is based on the study of special technologies (Gypsum Cardboard constructions montage) and general training courses, In the interior of the shelves, with various paperwork and panels manufactured from different materials, producing walls and divisions by different means and methods, It also sets the hanging ceiling in compliance with safety rules. The program determines the content of the teaching and ensures the development of the necessary skills of the professional Gypsum Cardboard Specialist. The study is considered completed when the results of the study are achieved and the student receives the diploma confirming the qualification of the third level.

Educational Program study result

Knowledge and Understanding

Has the knowledge of the basic facts, principles, processes and general concepts characteristic of the field, and understands the necessary steps to perform complicated tasks.

Knows:

Basic concepts and processes of the field; Regulatory norms of labor safety and fire protection; Types of buildings and structures; Classification of their separate parts and constructive elements; Drawing basics; the basic principles of Building construction technology, Types of plastering works; Dry milling technology; Gypsum cardboard carcasses; Wall covering with Gypsum cardboard plates and Facing panels (technology), The methods of processing the insertion of plates with Gypsum cardboard plates; Types and materials for plastering systems; Plaster mixtures; Checking the quality of the works and ways of operating control methods. Realizes what steps should be taken to perform complicated tasks.

Ability to use Acquired Knowledge and Skills in Practice

Can use a wide range of skills that characterize the specificity of the field, assess the other approach to perform tasks, pick and adapt

appropriate methods, tools and materials.

At the basic level can read construction drawings and perform simple sketches; Arrangement of carcass with appropriate technology; Covering walls and divisions with gluing and different methods; Processing of input sets with Gypsum cardboard plates and with different techniques and methods; Arrangement of metal and wooden frames for entering and hanging ceilings; Entry ceiling inserted with Gypsum cardboard plates and panels.

Conclusion-Making Skills

Can use the information sources, their assessment and analysis of information to solve the problems arising in different situations.

Is able to use the information sources, their adequate assessment, analysis, conclusion, to solve professional problems arising in different situations.

Communication Skills

Can provide oral and written communications in occupational issues in different situations. Effectively utilizes information and communication technologies related to professional activities; Practical use of foreign language.

Is Able to communicate orally and in writing on professional issues. Uses information and communication technologies; Can have a simple communication in a foreign language.

Learning Skills

She/he can take responsibility for her/his own studies within the pre-determined tasks.

Values:

In different situations act in accordance with the characteristic values of professional activity. Protect the rules of labor safety and industrial hygiene. Cares about the quality of work. Have a sense of responsibility for professional activities.

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Professional Educational Program

Technician of Construction, Road, Railway Vehicle and Equipment IV

Credits assigned to the program (ECTS)

60

Awarded Qualification

The fourth Level Professional Qualification of Technician of Construction, Road, Railway Vehicle and Equipment

The Language of Study

Georgian

The Purpose of the Educational Program

The program aims at preparing the fourth Level Professional Qualification of Technician of Construction-Road-Railway Vehicle and Equipment who can:

- independently manage construction and road -railway vehicles and equipment, to serve them, to perform the average complexity of the work.
- Independently dismantle, repair and arrange the construction, road -railway and vehicle engines and equipment working bodies, key nodes and mechanisms.
- Under the guidance of an experienced specialist, the need for appropriate works, spare parts and materials for the maintenance, repair and maintenance of machines and equipment.

Educational Program study result

Knowledge and Understanding

Has the knowledge based on factual circumstances and theoretical foundations, and understands the general possibilities of solving problems.

Knows the constructive structure of the vehicles and nodes of the specialty and the working principles. Understands the possibilities of solving specific problems in the field. Knowledge of Special measurement instruments, tools, use of resources and capabilities. Knowledge of Labor protection, safety standards and requirements. Knowledge of specific requirements for transportation of mobile construction vehicles. Knowledge of foreign language on the level of readability and analysis of technical information.

Ability to use Acquired Knowledge and Skills in Practice

Can work in the planning and execution process to use reliable sources of information, develop a strategy to overcome the specific task raised and evaluate the results obtained to improve the work done.

To plan independently and perform production tasks in accordance with the actual circumstances. Use of modern and new measurement tools and waste. Protection of the safety and safety norms and requirements in accordance with specific production conditions.

Conclusion-Making Skills

Can develop appropriate approach to solve specific problems, review alternative opportunities and analyze the outcome results.

Capable of analysis of problems arising in different industrial situations, elaboration of the appropriate approach, review of alternative

proposals.

Communication Skills

Can provide oral and written communications on occupational issues related to variable situations, utilize new information and communication technologies independently, processing the information related to the profession obtained in foreign language.

Learning Skills

Can determine independently their own learning directions and foresee, however partly in a changing situations. Can determine independently the direction of further education in a partially changing situation. Can obtain new information, study, analysis and implementation in the working process.

Values:

Responsible for the value of professional activities and in changing situations in accordance with them. Protection of moral, ethical and legal norms in mechanics engineering. Protection of sectoral and international technical norms and standards. It has the ability to adapt to the problems of professional ethics and morals. It takes care of safety rules and environmental protection.

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Professional Educational Program

Technician of Construction, Road, Railway Vehicle and Equipment III

Credits assigned to the program (ECTS)

30

Awarded Qualification

The Third Level Professional Qualification of Technician of Construction, Road, Railway Vehicle and Equipment

The Language of Study

Georgian

The Purpose of the Educational Program

The program aims at preparing the third Level Professional Qualification of Technician of Construction-Road-Railway Vehicle and Equipment who can:

- Independently manage the construction road, rail vehicles and equipment, to serve them, to perform the average difficulty repair work.
- Under the guidance of an experienced specialist, dismantle, repair and arrange the construction, road, railway and vehicle engines and equipment working bodies, key nodes and mechanisms.

Educational Program study result

Knowledge and Understanding

Has the knowledge of the basic facts, principles, processes and general concepts characteristic of the field, realizing the necessary steps to perform complicated tasks;

Has a specialty correspondence structural construction knowledge of Vehicles and nodes

- Knowledge of Special measurement instruments, tools, use of resources and capabilities.
- Knowledge of general norms and requirements of labor protection and safety.
- Knowledge of foreign language at basic level.

Ability to use Acquired Knowledge and Skills in Practice

Can use a wide range of skills that characterize the field specificity, evaluate different approaches to perform tasks, select and adapt appropriate methods, tools and materials. •

Can independently perform production assignments using basic materials and tools.

• Use of special measuring instruments and waste. Perform the general norms and requirements of labor protection and safety.

Conclusion-Making Skills

Can use the information sources, their assessment and analysis of information to solve the problems created in different situations.

Communication Skills

Can provide oral and written communications on occupational issues related to variable situations, utilize new information and communication technologies independently, processing the information related to the profession obtained in foreign language.

Can provide oral and written communications on occupational issues related to variable situations.

- Effectively utilizes information and communication technologies related to professional activities.

- Is able to use a foreign language practically in professional activities.

Learning Skills

Can be defined within the predefined tasks and to take responsibility for his own learning.

Can define the level of further education within the pre-defined tasks, obtain professional information, analyze and share.

Values

Operate in different situations in accordance with the characteristic values of professional activity.

Protection of moral-ethical and legal norms of mechanics engineering. Protection of technical norms of mechanics engineering field

Familiar with the rules and to protect the safety .Having a sense of responsibility.

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Computer Engineering Graphic Operator (for Georgian Language speakers)

Credits assigned to the program (ECTS)

66

Awarded Qualification

The Third Level Professional Qualification of Computer Engineering Graphic Operator

The Language of Study

Georgian

The Purpose of the Educational Program

The purpose of the program is to prepare a specialist who will have the following competences: Knowledge of computer technologies, engineering graphics, performing constructive and construction drawings and management of automated design systems. Architectural and construction objects, environmental and three-dimensional (2D, 3D) modeling, visualization and animation; Creation of project documentation. Raster image processing. Creative approach to solve and implement innovative tasks. Act in different situations in accordance with the characteristic values of professional activity; Use specific skills in specific professional practice. Small individual entrepreneurship.

Educational Program study result

After completion of the program, the person can:

- Outline of the object with graphical traditional method;
- Implement the electronic version of the drawing in the computer program;
- Bringing the equipment in readiness to perform the work;
- Formation of the Project Documents.

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Professional Educational Program

Computer Engineering Graphic Operator (for Non Georgian language speakers)

Credits assigned to the program (ECTS)

81

Awarded Qualification

The Third Level Professional Qualification of Computer Engineering Graphic Operator

The Language of Study

Georgian

The Purpose of the Educational Program

The purpose of the program is to prepare a specialist who will have the following competences: Knowledge of computer technologies, engineering graphics, performing constructive and construction drawings and management of automated design systems. Architectural and construction objects, environmental and three-dimensional (2D, 3D) modeling, visualization and animation;

Creation of project documentation. Raster image processing. Creative approach to solve and implement innovative tasks. Act in different situations in accordance with the characteristic values of professional activity; Use specific skills in specific professional practice. Small individual entrepreneurship

Educational Program study result

After completion of the program, the person can:

- Outline of the object with graphical traditional method;
- Implement the electronic version of the drawing in the computer program;
- Bringing the equipment in readiness to perform the work;
- Formation of the Project Documents.

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