

Code and title of specialty (direction): 141 «Electrical Energetics. Electrical Engineering and Electricmechanics».

Title of specialization: «Electric Machines and Devices».

Code and title of the field of knowledge: 14 «Electrical Engineering».

Qualification: Master on speciality « Electrical Energetics. Electrical Engineering and Electricmechanics» with the specialization «Electric Machines and Devices».

Number of credits: 120 ECTS credits.

Grade of higher education: The second (Master) one corresponds to the seventh qualification degree of the Ukrainian National Qualifications Frame.

Requirements to the previous education grade: A person has a right to get a Master degree under the condition of a Bachelor degree. If the previous degree was received in another country, a nostrification is required.

Qualification requirements: Higher education document is given to a person who completed the program successfully and was certified. Graduation certification is done by evaluating competence formation level. The form of certification is qualification paper defense.

Program study results: to use conceptual knowledge including knowledge of modern achievements for solving complex and unpredictable tasks and problems; to use theory, principles, methods and concepts of general engineering sciences in education and professional activity; to collect and interpret information and choose methods and tools to solve professional tasks; to apply innovative approaches to solve professional tasks; to inform specialists and non-specialists of information, ideas, problems and solutions and personal experience in the field of professional activity; to manage complex actions or projects; to form a communication strategy; to use a foreign language for professional purposes; to be responsible for the professional development of individuals and / or groups; to be in charge of decision-making under unpredictable conditions; to study with a high level of autonomy.

Technological professional activities: to carry out electrical works; to measure the parameters characterizing the quality of installation; knowing the principle of the electromechanical system operation to make its adjustment, to measure the parameters characterizing the quality of the functioning system, to identify problems and take measures to eliminate them; to train the staff on technology, safe techniques and practical skills in installation and adjustment of electrical equipment; to be able to test and put into operation new equipment; on the basis of the analysis of the technical and operational characteristics of electromechanical systems to be able to conclude as to their compliance with the specifications and actual operating conditions; to conduct the production process, to carry out operational control over the operation of equipment and its modes, to analyze the work of mechanisms in their interconnection and to provide the necessary technical recommendations; to organize the work on maintenance and operation of electrical equipment, to draw conclusions concerning the quality of its operation, to take

measures to eliminate the noted deficiencies; to identify sources of excessive electricity consumption and take measures to eliminate them; to evaluate the prospects for the development and modernization of electrical equipment; to introduce energy-saving technologies and equipment; to carry out expert examination of proposals and provide assistance to rationalizers, inventors and innovators of production.

Organizational professional activities: to organize the work of the staff at the manufacturing site and the material support; to organize preventive and repair work of electrical equipment; to issue the necessary documents station; to ensure trouble free operation of electrical equipment; to prepare the necessary documentation for the operation of workplaces; to ensure the implementation of labor protection rules in the workshop; to conduct safety training in the workplace; to ensure compliance with fire safety conditions of life and sanitary-and-hygienic standards of work; to keep records and identify the causes of equipment accidents, draw up acts and develop measures to prevent them.

Management professional activities: to develop recommendations for the implementation of scientific results in the production of electric machines and devices; to analyze the prospects and directions of electromechanical systems development; to organize the work of the department or project group; to perform planning of technical and methodological guidance of project design or its parts in all stages or phases of design, construction and putting into operation facilities; to draw up and execute contracts, acts for acceptance of work and to coordinate their work with the management and the customer.

Employment competences: Master on speciality «Electrical Energetics. Electrical Engineering and Electricmechanics» can take jobs in the public and private sectors in various activities, including: production, repair, maintenance and adjustment of electrical equipment; design of electromechanical and electrotechnical systems; application of modern energy efficient technologies; creation of computer control systems of technological processes; design and adjustment of automation and electromechanotronics.

Further study perspective: Master on speciality « Electrical Energetics. Electrical Engineering and Electricmechanics» with the specialization «Electric Machines and Devices» may continue studying in postgraduate doctoral studies program in Field 14 «Electrical Engineering».

Department graduating a student with degree: Department of Electrical Engineering.

Institute/faculty: Faculty of Engineering.

Educational program supervisor: Associate Professor, Ph. D. in Technology, Filimonenko K. V., kostiantyn.kun@gmail.com, +38 (050) 478 3405.