Code and title of specialty (direction): 131 "Applied Mechanics"
Title of specialization: Engineering Technology
Code and title of the field of knowledge: 13 "Mechanical Engineering"
Qualification: Bachelor of Applied Mechanics in Engineering Technology
Number of credits: 240 ECTS credits
Grade of higher education: first (bachelor) corresponds to the sixth qualification level of the Ukrainian National Framework of Qualifications.
Requirements to the previous education grade: a person has the right to obtain a Bachelor's degree in case of completing secondary education or in possession of Associate's Degree on relevant specialty. Provided that the previous degree was obtained in another country, it requires nostrification.
Qualification requirements: the higher education document is issued to a person who had successfully completed the educational program and was certified. The final attestation is carried out on the basis of evaluation of the degree of development of competences. Form of attestation – defence of a Bachelor's thesis.
Program study results: A graduate must possess the following competencies: to have knowledge and understanding to form a stable outlook, the correct perception of the problems of modern society, the human existence, spiritual culture; knowledge and understanding of the need to develop political consciousness, political culture and pluralism; understanding of active life position and citizenship; understanding of social responsibility for the organization; knowledge and understanding of effective communication methods for interactions; understanding of the need to assimilate new knowledge, self-improvement; knowledge of the rules of healthy lifestyle; knowledge and understanding of the application of methods based on analysis of systems, methods and ways of its implementation; knowledge for providing safe working conditions and life; knowledge of measures to ensure population protection from the consequences of accidents, natural disasters and weapons of mass destruction use; knowledge of philosophy, logic, psychology, culture, ethics and aesthetics, pedagogy, sociology, ecology and life safety measures, contributing to the development of general culture level and socialization of a person, directing her to ethical values.
Knowledge of national history, economics and law, understanding the cause and effect of social ties and the ability to use them in professional and social activities; knowledge of basic mathematics sections, to the extent necessary to possess the mathematical apparatus of system sciences, the ability to use mathematical methods in technology of machine building; basic knowledge of system sciences necessary for mastering general professional disciplines;
Basic knowledge of computer science and modern information technologies; knowledge and understanding of the rules of written and spoken native language; knowledge and understanding of the rules of written and spoken foreign language; knowledge of principles, rules and methods for managing information and documents; knowledge of methods and rules of economic calculations; knowledge of methods and rules for working with computers and the Internet;
Knowledge of laws, practices and methods of scientific and applied research; knowledge of system research methodologies, techniques and analysis of complex natural, technological, economic and social objects and processes, understanding the complexity of objects and processes of different nature, their variety, versatility, experience and existence conditions for the solution of applied and scientific tasks in the field system sciences; mathematical knowledge of methods for constructing and analyzing models of natural, technological, economic and social objects and processes of information, development of mathematically reasonable algorithms for

system operation; knowledge and understanding of the general principles of computer systems operation and architecture, skills of system and application software use; knowledge of the requirements of applicable national and international standards, methods and tools for the design of machines and technologies; knowledge and understanding of programming to solve specific tasks; knowledge of advanced construction, manufacturing technology and methods of manufacturing products, cutting and measuring tools, etc; knowledge of basic methods and approaches to the organization, planning, management and control of work on the design, development, post-project support and maintenance of common purpose utilities; knowledge and understanding of system analysis techniques to build models of objects and processes of different nature; knowledge of modern methods of development and optimization of procurement, adaptations and typical manufacturing processes; knowledge of methods of identification, formulation, specification, analysis of standard machines and machine tools; knowledge of models of sharing knowledge, methods of obtaining and structuring knowledge, logical processing for the development of general-purpose machines and machine tools; knowledge of methods, standards, national standards and current legislation on organization, planning, control and work on the design and development of machines and processes; knowledge of typical methods of standard machine details manufacturing; knowledge of methods, management and testing procedures for technological processes in the manufacturing of new products, knowledge of methods and rules of operation of machine tools, tools and utilities for standard technologies.

Employment competences: Bachelor of specialty 131 “Applied Mechanics” may hold positions in companies, small companies and institutes of designers, engineers, production managers, marketing professional support specialists on implementation, realization of automated and robotic manufacturing equipment for manufacturing, project, research institutions and enterprises in various industries: machine production, motor industry, transportation, light industry, refining, chemical, electronic and other industries.

Further study perspective: Bachelor of specialty 131 “Applied Mechanics” may continue his education for the Master’s Degree according to the system of cross-entry on every existing specialty of every branch of knowledge, if it is not prohibited by law, provided that he successfully passes the entry examinations.

Department graduating a student with degree: Machine Science and Industrial plant equipment

Institute / Faculty: Engineering Faculty

Educational program supervisor: Professor, Doctor of Technical Sciences, Archipov O. G., arkhypov@gmail.com; Mob. tel. 050 987 9888