

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE  
CHERNIHIV NATIONAL UNIVERSITY OF TECHNOLOGY

EDUCATION AND SCIENTIFIC PROGRAM

BRANCH OF KNOWLEDGE	14 Electrical engineering
SPECIALTY	141 Power engineering, electrical engineering and electromechanics
EDUCATIONAL LEVEL	THIRD (EDUCATION AND SCIENTIFIC)

<b>Program framework</b>			
<b>Doctor of Philosophy in Power Engineering, Electrical Engineering and Electromechanics</b>			
<b>The type of diploma and volume of the program</b>	Diploma of Doctor of Philosophy, the first scientific level, 4 academic years, 60 credits ECTS		
<b>Higher education institution</b>	Chernihiv National University of Technology		
<b>Accrediting institution</b>	Ministry of Education and Science of Ukraine, Ukraine, Peremohy Avenue, 10, Kyiv, 01135		
<b>Period of accreditation</b>	2016		
<b>Program level</b>	OF for EHEA – Third cycle, EQF for LLL – 8 level ; Ukraine NQF – 8 level.		
<b>A The purpose of the program</b>			
	To provide, based on the master's degree, the preparation of research and academic staff in the field of power engineering, electrical engineering and electromechanics by means of their acquiring the competencies sufficient for carrying out the original scientific research, the results of which have scientific novelty, theoretical and practical value, as well as their support in the preparation and defense of the dissertation.		
<b>B Program characteristics</b>			
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		<p>objects and processes;</p> <ul style="list-style-type: none"> <li>- Development of models and methods for automation of the functions and tasks of production and organizational management in ordinary and multilevel structures based on creation and use of new technologies;</li> <li>- Creation of technologies for research, development and implementation of tools for building of universal and specialized power supply systems;</li> <li>- Development of theoretical and applied background for building of control systems for converters of electric energy and electric drive;</li> <li>- Creation of methods and technologies for system analysis, development and building of electric systems and networks, power converters and electric drives;</li> <li>- Creation of information technologies for the development of models and methods of control for power converters and distributed generation objects;</li> <li>- Modeling of subject areas of power supply and generation systems based on the creation and application of relevant information technologies and methods;</li> <li>- Development of expert control systems for electric power plants for decision-making, as well as knowledge-oriented systems for supporting decisions in risk conditions;</li> <li>- Development of technologies for building and implementation of automated systems of technical diagnostics of electrical and electromechanical equipment of the electric power industry;</li> <li>- Creation of methods and technologies for development of models, methods and tools for automation of research and design of electrotechnical and electromechanical complexes and systems;</li> <li>- Development and research of models and methods of quality assessment and reliability increasing, functional safety and vitality of systems of conversion and transportation of electric power;</li> <li>- Research, development and implementation of Internet technologies for the building of service-oriented systems, as well as for the organization and implementation of distributed generation systems, transportation of electricity and electromechanical systems</li> </ul>
3	<p style="text-align: center;"><b>Program Orientation</b></p>	<p><b>Research and applied.</b> Scientific research on the creation of new principles, methods and technologies for building of efficient electric power, electrotechnical and electromechanical complexes, which will have wide practical application.</p>