

<b>Subject</b>	<b>Variable speed electrical drives</b>
<b>HE level</b>	Second (magistracy)
<b>Year</b>	1
<b>Scope</b>	5.5 ECTS credits
<b>Language</b>	Ukrainian, English
<b>Department</b>	Automation of electromechanical systems and electrical drives department
<b>Learning requirements</b>	Knowledge of disciplines: elements and devices of electromechanical systems and electrical drives, theoretical foundations of electrical engineering, electrical drive, power electronics, automation systems, electrical machines
<b>What will be learned</b>	Connection, tuning, commissioning and maintenance of the variable speed electrical drives and frequency converters.
<b>Why is it necessary</b>	The modern frequency converter is a high-tech electrical product that combines power electronics, a digital signal processor based control system with appropriate software which has several hundred settings that determine its modes of operation, automation and communication functions with external digital devices.
<b>Why you can learn (learning outcomes)</b>	<ul style="list-style-type: none"> <li>- procedures for putting the frequency converter into operation;</li> <li>- understanding of the converter setting parameters;</li> <li>- ability to connect the converter to industrial networks and organize remote control of the converter;</li> <li>- ability to perform the implementation of simple automation functions by means of a frequency converter;</li> <li>- diagnose faults of the frequency converter;</li> </ul>
<b>How to use the acquired knowledge and skills (competencies)</b>	Commission and service frequency converters in real production conditions.
<b>Information support</b>	Syllabus, test project
<b>Form of classes</b>	Lectures, practical classes
<b>Semester control</b>	Test