Learning outcomes for Undergraduate Professional Study Programme in Electrical Engineering

-Ability to analyse technical solutions of electric and electronic elements, devices, plants and systems.
-Ability to dimension elements and equipment in accordance with the user requirements specifications and technical norms.
-Ability to take part in conceptual design projects and write documentation for design and implementation of devices, plants and systems.
-Ability to supervise equipment manufacturing and testing as well as plant design according to project plan and field research.
-Ability to manage equipment maintenance and provide help in using and servicing it, with both the manufacturer and in the field.

Additional learning outcomes for specialisation in Automation and Computer Process Control:

-Ability to analyse and test static and dynamic properties of elements in technical processes in order to make a mathematical description of control characteristics.
-Ability to select equipment necessary for setting a system of control, regulation and monitoring of technical processes based on energy conversion, fluid warehousing, material and people transportation and heat processes.
-Ability to implement regulation models in order to do analysis and synthesis to reach the requested regulation process indicators.
-Ability to introduce control and regulation algorithms based on analysis of simple processes.
-Ability to develop control and management software by using process controllers.

Additional learning outcomes for specialisation in Electrical Power Engineering:

-Ability to understand the operating principles of rotating machines, transformers, overhead transmission lines and switchgear.
-Ability to analyse mechanical, voltage and current stresses of power plant elements.
-Ability to implement models of power plant elements in order to determine current and voltage conditions in both normal and short circuit plant operating circumstances.
-Ability to select rotating machines for electromechanical energy conversion.
-Ability to select transformers, overhead transmission lines and switchgear for transmission and distribution of electricity.

Additional learning outcomes for specialisation in Communication and Computer Technology:

-Ability to program or take part in programming solutions to telecommunication objects, networks or systems.

-Ability to organise and supervise a quality project implementation carried out to achieve specific functionalities of telecommunication objects, networks or systems.

-Ability to formulate technical requests for intervention on telecommunication objects, networks or systems in order to coordinate functionalities with norms and user request specifications.

-Ability to develop and implement embedded computer systems and the accompanying hardware and software equipment.

-Ability to develop, implement and provide support for supervision of computer controlled processes.