

After graduation, the electrical engineer of Hanoi University of Science and Technology (HUST) must obtain:

1. Solid professional knowledge to be well adapted to different tasks such as research, development, consulting, management and production in the broad field of Electrical Engineering

1.1 The ability to apply the basic knowledge of mathematics, physics, and computing in the calculation and simulation of electrical equipment and power systems

1.2 The ability to apply basic knowledge of circuit theory, electric machine, control systems, power systems, electronic engineering in research, analysis of electrical equipment and power systems

1.3 The ability to apply the core and advanced knowledge in electrical equipment and power systems combined with the ability to exploit the use of software tools in the design, implementation, and evaluation of electrical equipment and power systems..

2. Professional skills and personal qualities needed to succeed at work

2.1 Analytical and problem-solving skills

2.2 Ability to carry out experiments, to do research and to explore knowledge

2.3 System thinking and critical thinking

2.4 Dynamic, creative and serious in work

2.5 Professional ethics and responsibilities

2.6 Understanding contemporary issues and lifelong learning

3. Social skills needed to work effectively in a multi-disciplinary team and in an international environment

3.1 Organizational skills, leadership and teamwork (multi-disciplinary)

3.2 Effective communication skills through writing, presenting, discussing, negotiating, mastering situations, using effective and modern tools

3.3 Effective usage of English at work, TOEIC score ≥ 450 .

4. Capacity for project planning, design, implementing and operating of electrical equipment and power systems in accordance with the economic, social and environmental context

4.1 Awareness of the essential relationship between electrical equipment & systems solutions with economic, social and environmental factors in the globalized world

4.2 Capability to identify problems and formulate solution ideas, to propose and develop electrical engineering projects and applications

4.3 Capability to design electrical-electronic equipment and power systems

4.4 Capability to deploy, adjust and put into operation the electrical equipment and power systems

4.5 Capability for operation and maintenance of electrical equipment and power systems

5. Political awareness, spirit of serving the people and the country, having good health, meeting the requirements for building and defending the country

5.1 Having the level of political understanding according to the common requirements of the Ministry of Education and Training

5.2 Having a Physical Education Certificate and a Certificate of National Defense Education according to the requirement of the Ministry of Education and Training