

Label	EUR-ACE®
Higher Education Institution	ETS de Ingeniería y Diseño Industrial Universidad Politécnica de Madrid
Country	Spain
State/Province	Madrid
Name of the Programme	Bachelor's Degree in Electrical Engineering
Degree Awarded	Bachelor's Degree in Engineering
Qualification Level	First Cycle
Programme Objectives; Profile	<p>Electrical Engineering is based on scientific principles to control variables such as power, energy, electrical voltage and intensity, magnetic flux, velocity, position and torque, to design and analyze physical systems of diverse complexity. These are the foundations of the design of power generation plants, electric power transmission lines and networks, electric machines and motors, as well as systems for the production of electric energy through renewable energies.</p> <p>Specifically this degree promotes competences in calculation and design of electrical machines, control of machines and electrical drives and their applications, calculation and design of low and medium and high voltage electrical installations, calculation and design of electrical lines and transport of electric power, knowledge about electrical power systems and their applications, design of power plants, applied knowledge of power electronics, automatic regulation and its application to industrial automation, and applied knowledge about renewable energies.</p> <p>Bachelor's degree in Electrical Engineering is linked to the regulated profession of Industrial Technical Engineer (Electricity). Consequently the graduates obtain the professional attributions for writing and development of technical projects, reports, production management, operation and maintenance, marketing, education and training, and quality control, environment and prevention of</p>

	occupational risks.
Programme Duration	<i>8 Semesters</i>
Total Number of ECTS Credits Awarded	240 ECTS
Brief Description of the Programme	<p>This degree qualifies for a regulated profession. Consequently, the curriculum is based on the following structure:</p> <ul style="list-style-type: none"> • Basic subjects competences, 60 ECTS. • Competences of subjects common to the industrial branch, 60 ECTS. • Competences of specific technologies subjects, in electrical engineering, 48 ECTS. • 60 ECTS in subjects chosen by the University. • Bachelor's Thesis, 12 ECTS.
Examples of Very Good Practice	<p>Both the curriculum and the evidences of learning results show that the subjects are of high scientific / technological level.</p> <p>The different groups have expressed an adequate satisfaction with the degree. Practical and applied training is considered adequate both in the module common to the industrial branch and in the specific technology. Both students and graduates show that students achieve satisfactorily the results defined by ENAEE. Employers also underline the high technical qualifications of graduates.</p> <p>Training activities keep an adequate balance between lectures, laboratory practices, guided work and autonomous work. Moreover, transversal competences of teamwork and oral and written communication are developed.</p> <p>The external practices offered are sufficient to satisfy the demand of the students. They are appropriately managed both by the origin institution and the host institution company. Both students and employers declare a high degree of satisfaction.</p>

	Architectural barriers have been eliminated in the building to improve the accessibility. There is also a place in the library adapted for people with visual deficiencies.
Accredited without / with Adjustment Requirements	Accredited with Adjustment Requirements
Adjustment Requirements	The Universidad Politécnica de Madrid will promote the implementation and use of the quality system to make it a standard practice with demonstrable evidence.
Accredited by	ANECA in collaboration with IIE
Accredited	From 29/09/2016 to 29/09/2019.