Bachelor's Degree in Energy Engineering

Introduction to the degree

The energy sector, with its multiple facets related to energy production, transport, distribution and use, is one of the most important technological fields today, and it keeps growing. It is definitely a strategic sector for the future development of society.

Energy engineering belongs to the industrial engineering branch. In essence, it focuses on the design and management of energy facilities and components, aimed at ensuring the best use of available resources, to make the most of renewable energy sources and, at the same time, to minimize their impact on the environment.

International mobility

You can spend one semester abroad in one of the universities in more than 30 different countries in Europe and around the world which the School has signed exchange agreements with (University of Manchester, École Centrale Paris, INSA Lyon, Politecnico di Milano etc). Studying at another university will help you complete your studies, live a very positive personal experience, experience other cultures and become fluent in other languages. You can also spend one semester in another university in Spain.

Internships

You will have the opportunity to gain work experience in one of the many private and public companies, public bodies, technological institutes, consultancies and engineering firms with which the School has signed agreements. In many cases, in addition to complementing your studies you can even carry out your final degree project.

Continuation of studies

With this degree, you will be able to access to:

- MD in Energy Technologies for Sustainable Development
- MD in Industrial Engineering
- MD in Industrial Safety and Environment
- MD in Alternating Internal Combustion Engines
- MD in Maintenance Engineering
- MD in Hydraulic Engineering and Environment
- MD in Sustainable Chemistry
- MD in Electronic Systems Engineering

Professional opportunities

There are many employment options for graduates in Energy Engineering. On the one hand, you can work in companies related to energy, such as production, transport and distribution of energy companies; public bodies that are responsible for the analysis, monitoring and planning of the energy sector; companies that work for the audit, optimization and management of energy or those that design, plan, implement and keep in good condition energy facilities. On the other hand, you can work in companies with a strong energy component, such as transport of goods and passengers enterprises and agencies that, due to the amount of energy that they use, have to manage their own energy systems.

Enjoy our huge campuses with spaces designed for you such as the Student Recreation House.

You can do up to 70 sports in our facilities.

You will find many services at your disposal: language courses, discounts in public transport, counselling, employability support…

and be part of Spain’s best technological university according to the Shanghai ranking
Bachelor's Degree in Energy Engineering

Credits for obtaining the degree

<table>
<thead>
<tr>
<th>Basic courses</th>
<th>Compulsory</th>
<th>Optional</th>
<th>Internship</th>
<th>T.F.G.</th>
<th>Total</th>
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<td>60.00</td>
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The subjects that you will be able to take

**Basic courses**
- Chemistry
- Computer Science
- Industrial Business and Economy
- Mathematics I
- Mathematics II
- Physics I
- Physics II
- Statistics
- Technical Drawing

**Compulsory courses**
- Applied Thermodynamics
- Circuit Analysis
- Combustion and Heat Generation
- Control Systems
- Elasticity and Strength of Materials
- Electrical Machines
- Electronic Systems
- Energy and Sustainable Development
- Energy Audit
- Energy Markets
- Environmental Technology
- Fluid Mechanics
- Fundamentals of Business Organization
- Heat Transfer

**Hydraulic Machines and Fluid Conveyance**

**Hydroelectric Power Plants**

**Machine Technology**

**Material Science**

**Mathematics III**

**Nuclear Technology**

**Photovoltaic Energy and Power Electronics**

**Physics III**

**Power Plants and CHP Generation**

**Power Systems and Technology**

**Projects**

**Refrigeration and HVAC**

**Thermal Machines**

**Thermal Renewable Energies**

**Thermodynamics**

**Wind Power and Renewable Power Generation**

**Elective courses**
- Advanced Nuclear Power Plants
- Applied Photochemistry
- Chemistry and Renewable Energy
- Electricity and Sustainability
- Energy Efficiency in Buildings
- Energy Planning and Management
- Energy-Intensive Industries
- English B2 - B2-A

**English I**

**French - A1 - A2 - B1 - B2**

**Geothermal Energy**

**German - A1 - A2 - B1 - B2**

**Academic Exchange**

**Italian - A1**

**Nuclear Safety**

**Operation of Nuclear Reactors**

**Physical Concepts in Historical and Cultural Perspective**

**Radioactive Protection**

**Scientific and Technical French - B1**

**Thermal Engines for Automotive Applications**

**Valencià Tècnic - C1 - C2**

**Water and Energy**