UNIVERSITAT POLITÈCNICA DE VALÈNCIA

Bachelor's Degree in **Energy Engineering**

Engineering and Architecture
Industrial and Aeronautical

School of Industrial Engineering
Building 5F
Campus of Vera (València)

4 courses
240 credits

Spanish and valencian

Credit 19,27€
(2020/2021)
It will make you eligible for scholarships

75 places

Cut-off marks

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www.upv.es/titulaciones/GIEN/

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

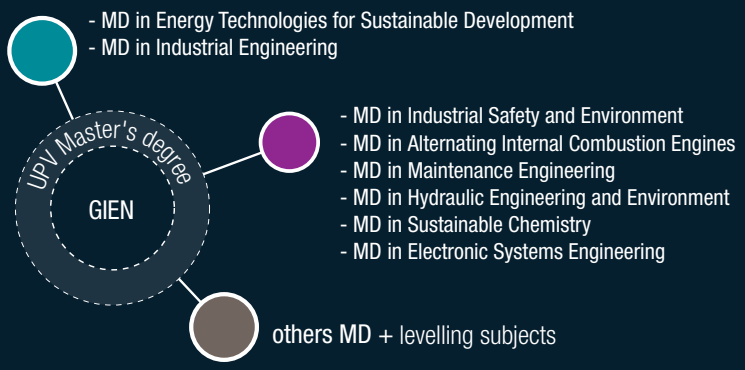
You can spend one semester abroad in one of the universities in more than 30 different countries in Europe and around the world which the School has signed exchange agreements with (University of Manchester, École Centrale Paris, INSA Lyon, Politecnico di Milano etc). Studying at another university will 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:



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.

Study at the UPV

and be part of
Spain's best technological university
according to the Shanghai ranking

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

You can do up to **40 sports** in our facilities.

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

UNIVERSITAT POLITÈCNICA DE VALÈNCIA

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Curriculum

Credits for obtaining the degree

Basic courses	Compulsory	Optional	Internship	TFG	Total
60.00	144.00	24.00	0.00	12.00	240.00

The subjects that you will be able to take

Basic courses

Chemistry
Computer Science
Industrial Business and Economy
Mathematics I - II
Physics I - 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

Academic and Professional French A1 - A2 - B1 - B2
Academic and Professional German A1 - A2 - B1 - B2
Academic and Professional Italian A1 - A2
Academic Exchange IA - IB - IC - ID
Advanced Nuclear Power Plants
Applied Photochemistry
Buiness Ethics and Social Corporate Responsibility
Chemistry and Renewable Energy
Comunicación Efectiva y Trabajo en Equipo
Electric motors efficiency
Electricity and sustainability
Energy Efficiency in Buildings
Energy Planning and Management
Energy-Intensive Industries
English B2 - B2A
English I
Geothermal Energy
Innovación y Emprendimiento
Nuclear Safety
Operation of Nuclear Reactors
Physical Concepts in Historical and Cultural Perspective
Project Management
Radioactive Protection
Scientific and Technical French - B1
Technical Valencian C1 - C2
Thermal Engines for Automotive Applications
Water and Energy