Bachelor's Degree in Engineering Physics

Introduction to the degree
This degree is designed to provide the training in communications physics and engineering necessary to access a solid professional career in research, development and innovation in the field of integrated communication with photonics and nanotechnology.

The curriculum has been developed with a special focus on interdisciplinarity between scientific and technological subjects, and offers broad, rigorous and harmonious training in the traditional fields of mathematics, physics, communication technologies and computing. In this way, it aims to give students the qualification and versatility necessary to face the technological challenges in communications and computing currently posed by the continuous advances in nanoscience and photonics.

International mobility
The School of Telecommunications Engineering (ETSI) has a wide network of universities with which it is possible to carry out international mobility agreements for students of this degree. Likewise, the research groups involved in the definition and development of the degree have a strong tradition of international collaboration with universities and companies.

Internships
The degree offers the possibility of doing external internships, up to 18 ECTS, in its last semester, in companies or institutions of this technological sector.

Continuation of studies
With this degree, you will be able to access to:

MD in Communications Technologies, Systems and Networks
GIFIS
MD and others + levelling subjects

Professional opportunities
The communications technology sector, driven by continuous advances in nanotechnology, computing and photonics, has been experiencing very significant business and industrial growth. This degree allows graduates to join companies and institutions both in the development or execution of their projects and in the definition and supervision of their innovation and research strategies.

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…
## Credits for obtaining the degree

<table>
<thead>
<tr>
<th>Basic courses</th>
<th>Compulsory</th>
<th>Elective and Internship</th>
<th>TFG</th>
<th>Total</th>
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<tr>
<td>60.00</td>
<td>138.00</td>
<td>30.00</td>
<td>12.00</td>
<td>240.00</td>
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## The subjects that you will be able to take

### Basic courses
- Algebra
- Calculus I - II
- Physics I - II
- Fundamentals of Business Organization and Management
- Chemical Fundamentals for Engineering I - II
- Computer Science and Programming
- Mathematical Methods I

### Compulsory courses
- Biophysics
- Fields and Waves
- Computing
- Electronics
- Analogue Electronics
- Digital Electronics
- Quantum Physics
- Statistical Physics
- Fluid Physics
- Photonics
- Integrated Photonics
- Technological Innovation and Entrepreneurship Management
- Instrumentation and Experimentation
- Analytical Mechanics
- Quantum Mechanics
- Mathematical Methods II
- Nanotechnology
- Probability and Random Signals
- Programming for Science and Technology
- Engineering Physics Projects
- Signals, Systems and Circuits
- Thermodynamics
- Digital Signal Processing

### Elective courses
- Biotechnology
- Quantum Computing
- Control Engineering
- Artificial Intelligence
- Quantum Optics
- Sensors
- Programmable Electronic Systems
- Digital Image Processing
- Statistical Signal Processing

* Generalitat Valenciana Official Bulletin