Bachelor's Degree in Biomedical Engineering

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 mark
etsi@upv.es
+34 963 877 170
www.upv.es/titulaciones/GIB/

Introduction to the degree

Biomedical engineering applies the principles and methods of engineering to troubleshooting in biology and medicine. It also aims to improve prevention, diagnosis, treatment and rehabilitation methods.

Biomedical engineering is the branch of engineering that has grown fastest in recent years. It is a continuously expanding field where there has been significant demand for professionals who are able to integrate into interdisciplinary teams along with health professionals, biologists and physicians, in order to address new challenges to improve health technology.

Biomedical Engineering students will learn about the following technologies: biomechanics, biomaterials and tissue engineering, bioelectronics, biomedical instrumentation, medical signal processing, medical imaging technology, computer systems and telemedicine, biotechnology and nanotechnology, clinical engineering and hospital management, amongst others.

International mobility

You can spend one semester in a prestigious university in one of many different countries in Europe and around the world, which the school has signed agreements with. Studying at another university will help you to complete your studies, give you a very positive personal experience, experiencing other cultures and becoming fluent in other languages. You may also spend one semester in a different university in Spain.

Internships

Internships in hospitals are compulsory. You will also have a chance to go on professional internships in private and public companies, the civil service, technological institutes, working in consulting and engineering related to research, development and the management of medical technology. In many cases this will be geared towards your final degree project.

Continuation of studies

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

- MD in Biomedical Engineering
- others MD + levelling subjects
- GIB Master's degree

Professional opportunities

With a degree in Biomedical Engineering you will be able to hold different work positions in the field of biomedical technology, in health centres and hospitals, in the health technology industry, research centres and government agencies within the field of medical technology.

You can work in technical departments in the design, development and innovation of new products, systems and processes. You may also hold positions related to the assessment and management of health technology.

You will be able to work in cooperation with other professionals in the fields of health and life, such as doctors, biologists, nurses, physiotherapists, podiatrists and orthopaedists, amongst others.

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…
Bachelor’s Degree in
Biomedical Engineering

Credits for obtaining the degree

<table>
<thead>
<tr>
<th>Basic courses</th>
<th>Compulsory</th>
<th>Optional</th>
<th>Internship</th>
<th>TFG</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.00</td>
<td>144.00</td>
<td>19.50</td>
<td>4.50</td>
<td>12.00</td>
<td>240.00</td>
</tr>
</tbody>
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The subjects that you will be able to take

**Basic courses**
- Business and Economy
- Cell-Level Morphology
- Chemistry
- Computer Engineering and Networks
- Graphic Techniques in Biomedical Engineering
- Mathematics I - II
- Morphology and Function of the Human Body
- Physics I - II

**Compulsory courses**
- Bases del Diagnóstico y Tratamiento en Patología Médico-Quirúrgica
- Biochemistry and Molecular Biology
- Bioelectricity
- Bioethics and Deontology
- Biomaterials
- Biomechanics
- Biomedical Imaging
- Biomedical Imaging Techniques
- Biomedical Instrumentation
- Biomedical Signals
- Biophysics
- Biotechnology and Nanotechnology
- Computational Biology
- Electronics
- Feedback Control in Biomedicine
- Hospital Management and Clinical Engineering
- Information Systems and Telemedicine I
- Innovation & Entrepreneurship
- Mathematics III
- Mechanical Systems
- Numerical Methods
- Projects and Manufacturing
- Radiotherapy and Radiation Protection
- Statistics
- The Role of Biomedical Engineering

**Elective courses**
- Academic and Professional German A1 - A2 - B1 - B2
- Academic and Professional Italian A1 - A2
- Bioinformatics
- Biomechanics and Medical Pathology
- Biomechanics and Surgical Pathology
- Biomedical Signal and Image Analysis
- Devices for Diagnosis and Therapy
- English B2
- Information Systems and Telemedicine II
- Intercambio Biomecánica A - B - C
- Intercambio Dispositivos Biomédicos A - B - C
- Intercambio TIC A - B - C
- Micro-Nanotechnology
- Minimally Invasive Technology
- Tissue Engineering and Regenerative Medicine
- Valencià Tècnic C1 - C2

This degree is internationally certified with the EUR-ACE quality label.