Bachelor’s Degree in Civil Engineering

Introduction to the degree

Civil engineering provides sustainable solutions for integrating infrastructures within the environment and the society. Urban planning and their utilities, railway and highway network design, coastal engineering, risk assessment of floods and earthquakes, design and construction of bridges, tunnels, dams and ports or the integral management of projects are the most common civil engineering activities.

Bachelor’s Degree in Civil Engineering qualifies for practising the regulated profession of Technical Engineer in Public Works, in its specialisation of Civil Engineering Construction. In addition, this program is the reference degree to access the Master’s Degree in Civil Engineering at UPV.

Bachelor’s Degree in Civil Engineering comprises 240 ECTS during 4 academic years. During the first two years, basic and scientific courses (statistics, physics, mechanics, mathematics, drawing,...) and pre-technological courses (structural analysis, construction, transportation,...) are taught, while third and fourth years focus on specific technological training in civil engineering.

International mobility

Students can study over more than 70 foreign universities the School has signed exchange agreements with. You can study at countries such as France, Germany, United Kingdom, Italy, Finland, Austria and the USA.

Internships

The School has signed agreements with leading construction companies and consultancies, both national and international, as well as with public and private organisations related to civil engineering. Students can do internships in Spain (visiting constructions or working in offices or laboratories) and abroad.

Continuation of studies

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

- MD in Civil Engineering
- MD in Environmental Engineering
- MD in Concrete Engineering
- MD in Hydraulic and Environmental Engineering
- MD in Intelligent Transport Systems, MD-ITS
- MD in Planning and Management in Civil Engineering
- MD in Prevention of Occupational Risks

Professional opportunities

This degree qualifies its graduates to work in the profession of Technical Engineer in Public Works, in its specialisation of Civil Engineering Construction. You can work in construction companies, engineering and architecture consultancies, construction materials and quality control, energy production, maintenance and operation of services firms etc.

You can also be self-employed and manage and supervise constructions, control the quality of materials, studies and projects, manage construction equipment and construction materials, surveys, risk prevention etc.

You can work public officer at the civil service’s technical staff for all types of administrations (ministries, councils, municipalities etc.) or do research in public or private schools.

Study at the UPV and be part of Spain’s best technological university according to the Shanghai ranking
# Bachelor's Degree in Civil Engineering

## Curriculum

### Credits for obtaining the degree

<table>
<thead>
<tr>
<th>Basic courses</th>
<th>Compulsory</th>
<th>Elective</th>
<th>Internship</th>
<th>TFG</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>72.00</td>
<td>124.50</td>
<td>31.50</td>
<td>0.00</td>
<td>12.00</td>
<td>240.00</td>
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</tbody>
</table>

### The subjects that you will be able to take

#### Basic courses
- Basic Knowledge of Programming and Numerical Methods
- Basic Statistics
- Drawing
- Economics, Legislation and Business Management
- Fundamentals of Physics in Civil Engineering
- Geology Applied to Civil Engineering
- Mathematical Foundations of Civil Engineering
- Mathematical Methods of Civil Engineering
- Mathematics - Extension Course
- Mechanics
- Physics Extension Course
- Representation Systems

#### Compulsory courses
- Building
- Business Management
- Chemistry for Civil Engineering
- Construction Materials and their Application to Civil Engineering
- Construction Procedures I - II
- Electrical Engineering
- Geotechnical Engineering Techniques and Methods
- Geotechnics and Foundations

#### Elective courses
- Highways and Airports
- Hydraulic Infrastructures
- Hydraulics and Hydrology
- Industrialised Construction
- Maritime Works
- Mechanics of Deformable Solids
- Prevention of Occupational Risks and Work Organization
- Projects
- Railways
- Science and Environmental Impact of Civil Engineering
- Structural Analysis
- Structural Concrete
- Structural Steel (I)
- Topography
- Transport and Territory

- Construction Management and Organization
- English
- Ethics in Civil Engineering
- Geotechnical Design of Foundations and Retaining Walls
- Hydraulic and Energy Facilities
- Infrastructure Maintenance Management
- Introduction to Water
- Management of Construction and Consulting Firms
- Mobility and Urban Transport
- Philosophy of Structures
- Port Facilities
- River Basin Management, Water Resources and River Engineering
- Road Safety
- Structural Design of Foundations and Retaining Walls
- Structural Steel (II)
- Surface and Groundwater Hydrology
- Technical Valencian C1 – C2
- Technology of Concrete Structures
- Urban History and Planning
- Urban Hydraulic Facilities

Internationally accredited bachelor’s degree (EUR-ACE – ABET)