

# Bachelor's degree in Informatics Engineering

## Vilanova i la Geltrú School of Engineering (EPSEVG)

Taking the **bachelor's degree in Informatics Engineering** provides the knowledge needed to conceive, design, develop, maintain and manage computer systems, services, applications and architectures and to understand and apply relevant legislation. You will also become an expert in new methods and technologies in the field of ICTs.

**Major in Information Technologies** will train you in the design and installation of computer networks and the applications needed to satisfy the needs of organisations in keeping with security requirements.

### Majors

- Information Technologies

#### GENERAL DETAILS

##### Duration

4 academic years

##### Study load

240 ECTS credits (including the bachelor's thesis). One credit is equivalent to a study load of 25-30 hours.

##### Delivery

Face-to-face

##### Language of instruction

Check the language of instruction for each subject (and timetable) in the course guide in the curriculum.

Information on [language use in the classroom and students' language rights](#).

##### Fees and grants

Approximate fees per academic year: €1,107 (€2,553 for non-EU residents). [Consult the public fees system based on income \(grants and payment options\)](#).

##### Location

[Vilanova i la Geltrú School of Engineering \(EPSEVG\)](#)

##### Official degree

[Recorded in the Ministry of Education's degree register](#)

#### ADMISSION

##### Places

55

##### Registration and enrolment

[What are the requirements to enrol in a bachelor's degree course?](#)

##### Legalisation of foreign documents

## PROFESSIONAL OPPORTUNITIES

### Professional opportunities

#### Major in Information Technologies

- Computer network administration.
- ICTs in companies and public administrations.
- Computer systems administration.
- Design, selection and implementation of computer and communications infrastructure.
- Data and access security in organisations.
- Implementation of new communications systems and protocols in the informatics sector.

## ORGANISATION: ACADEMIC CALENDAR AND REGULATIONS

### Academic calendar

[General academic calendar for bachelor's, master's and doctoral degrees courses](#)

### Academic regulations

[Academic regulations for bachelor's degree courses at the UPC](#)

### Language certification and credit recognition

Queries about [language courses and certification](#)

Vilanova i la Geltrú School of Engineering (EPSEVG)

### This bachelor's degree is also taught at

- Barcelona · FIB · [Show degree](#)

## CURRICULUM

Subjects	ECTS credits	Type
<b>FIRST SEMESTER</b>		
Fundamentals of Mathematics	7.5	Compulsory
Fundamentals of Programming	7.5	Compulsory
Introduction to Computers	7.5	Compulsory
Physics	7.5	Compulsory
<b>SECOND SEMESTER</b>		
Computer Structure I	7.5	Compulsory
Discrete Mathematics	7.5	Compulsory
Logic and Algebra	7.5	Compulsory
Programming I	7.5	Compulsory
<b>THIRD SEMESTER</b>		
Computer Structure II	6	Compulsory
Information Structure	6	Compulsory
Introduction to Software Engineering	6	Compulsory
Operating Systems	6	Compulsory

Subjects	ECTS credits	Type
Statistics	6	Compulsory
<b>FOURTH SEMESTER</b>		
Business	6	Compulsory
Computer Architecture	6	Compulsory
Computer Networks	6	Compulsory
Further Software Engineering	6	Compulsory
Interaction and Interface Design	6	Optional
<b>FIFTH SEMESTER</b>		
Academic and Professional Communication Techniques	6	Optional
Agile	6	Optional
Distributed and Network Operating Systems	6	Compulsory
Emobility	6	Optional
Formula Student 1	6	Optional
Internet	6	Compulsory
Moto Student 1	6	Optional
Operating Systems Administration	6	Compulsory
Parallelism and Concurrency	6	Compulsory
Programming Project	6	Compulsory
Writing Techniques for Engineering	6	Optional
<b>SIXTH SEMESTER</b>		
Academic Skills for Project Development	6	Optional
Databases Design and Administration	6	Optional
Emobility Lab	6	Optional
Formula Student 2	6	Optional
Future Internet	6	Compulsory
Information Technology Project	6	Compulsory
Moto Student 2	6	Optional
Multimedia Networks	6	Compulsory
Network Security and Administration	6	Compulsory
<b>SEVENTH SEMESTER</b>		
Cross-Platform and Distributed Programming	6	Optional
Data Mining	6	Optional
Development of Graphic Applications and Videogames for Mobiles Devices	6	Optional
Economics, Ethics and Society	6	Optional
Industrial Automation	6	Optional
Information Retrieval	6	Optional
Mobile Application Development	6	Optional
Railway Technologies	6	Optional

Subjects	ECTS credits	Type
<b>EIGHTH SEMESTER</b>		
Accessibility Applied	6	Optional
Ict Business Management	6	Optional
Language Practice	3	Optional
Smart Cities	6	Optional
Social Robotics Workshop	6	Optional
Sustainability Applied	6	Optional
Text Data Processing and Mining	6	Optional
Wireless Networks: Technologies and Applications	6	Optional
Bachelor's Thesis	18	Project