

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 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 (€1,661 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

50

Registration and enrolment

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

Legalisation of foreign documents

All documents issued in non-EU countries must be [legalised and bear the corresponding apostille](#).

PROFESSIONAL OPPORTUNITIES

Professional opportunities

- Management, innovation and supervision of informatics in all kinds of organisations.
- Software development, advice, consulting and technological support in ICT companies and others.
- Teaching and research.
- Management posts such as information systems manager, development manager, production and commercialisation manager, and head of informatics.
- Technical or middle management posts such as project supervisor; functional analyst; head of department; consultant; database architect; quality, methodology or organisational officer; and systems architect.
- Technical posts such as database administrator, network and systems officer, and information systems security officer.

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
FIRST SEMESTER			
Fundamentals of Mathematics		7.5	Compulsory
Fundamentals of Programming		7.5	Compulsory
Introduction to Computers		7.5	Compulsory
Physics		7.5	Compulsory
Major in (Eng) Menció en Tecnologies de la Informació	Fundamentals of Mathematics	7.5	Compulsory
	Fundamentals of Programming	7.5	Compulsory
	Introduction to Computers	7.5	Compulsory
	Physics	7.5	Compulsory
SECOND SEMESTER			
Computer Structure I		7.5	Compulsory
Discrete Mathematics		7.5	Compulsory
Logic and Algebra		7.5	Compulsory
Programming I		7.5	Compulsory

Subjects		ECTS credits	Type
Major in (Eng) Menció en Tecnologies de la Informació	Computer Structure I	7.5	Compulsory
	Discrete Mathematics	7.5	Compulsory
	Logic and Algebra	7.5	Compulsory
	Programming I	7.5	Compulsory
THIRD SEMESTER			
	Computer Structure II	6	Compulsory
	Information Structure	6	Compulsory
	Introduction to Software Engineering	6	Compulsory
	Operating Systems	6	Compulsory
	Statistics	6	Compulsory
Major in (Eng) Menció en Tecnologies de la Informació	Computer Structure II	6	Compulsory
	Information Structure	6	Compulsory
	Introduction to Software Engineering	6	Compulsory
	Operating Systems	6	Compulsory
	Statistics	6	Compulsory
FOURTH SEMESTER			
	Business	6	Compulsory
	Computer Architecture	6	Compulsory
	Computer Networks	6	Compulsory
	Further Software Engineering	6	Compulsory
Major in (Eng) Menció en Tecnologies de la Informació	Interaction and Interface Design	6	Optional
	Business	6	Compulsory
	Computer Architecture	6	Compulsory
	Computer Networks	6	Compulsory
	Further Software Engineering	6	Compulsory
FIFTH SEMESTER			
	Academic and Professional Communication Techniques	6	Optional
	Agile	6	Optional
	Emobility	6	Optional
	Parallelism and Concurrence	6	Compulsory
	Programming Project	6	Compulsory
	Writing Techniques for Engineering	6	Optional

Subjects		ECTS credits	Type
Major in (Eng) Menció en Tecnologies de la Informació	Distributed and Network Operating Systems	6	Compulsory
	Internet	6	Compulsory
	Operating Systems Administration	6	Compulsory
	Academic and Professional Communication Techniques	6	Optional
	Agile	6	Optional
	Emobility	6	Optional
	Parallelism and Concurrency	6	Compulsory
	Programming Project	6	Compulsory
	Writing Techniques for Engineering	6	Optional
SIXTH SEMESTER			
Academic Skills for Project Development		6	Optional
Emobility Lab		6	Optional
Major in (Eng) Menció en Tecnologies de la Informació	Databases Design and Administration	6	Optional
	Future Internet	6	Compulsory
	Information Technology Project	6	Compulsory
	Multimedia Networks	6	Compulsory
	Network Security and Administration	6	Compulsory
	Academic Skills for Project Development	6	Optional
	Emobility Lab	6	Optional
SEVENTH SEMESTER			
Industrial Automation		6	Optional
Major in (Eng) Menció en Tecnologies de la Informació	Cross-Platform and Distributed Programming	6	Optional
	Data Mining	6	Optional
	Economics, Ethics and Society	6	Optional
	Information Retrieval	6	Optional
	Mobile Application Development	6	Optional
	Industrial Automation	6	Optional
EIGHTH SEMESTER			
Accessibility Applied		6	Optional
Language Practice		3	Optional
Social Robotics Workshop		6	Optional
Sustainability Applied		6	Optional
Text Data Processing and Mining		6	Optional
Bachelor's Thesis		18	Project

Subjects		ECTS credits	Type
Major in (Eng) Menció en Tecnologies de la Informació	Ict Business Management	6	Optional
	Smart Cities	6	Optional
	Wireless Networks: Technologies and Applications	6	Optional
	Accessibility Applied	6	Optional
	Language Practice	3	Optional
	Social Robotics Workshop	6	Optional
	Sustainability Applied	6	Optional
	Text Data Processing and Mining	6	Optional
	Bachelor's Thesis	18	Project

August 2022. [UPC](#). Universitat Politècnica de Catalunya · BarcelonaTech