

ADMISSION REQUIREMENTS



The access requirements to the University in order to obtain a degree are the following: holding a Bachillerato Certificate (Spanish Baccalaureate) and passing the Prueba de Evaluación de Bachillerato para el Acceso a la Universidad (Spanish University Entrance Examination), or holding the Ciclo Formativo de Grado Superior Certificate (Spanish Advanced Vocational Training Certificate); or holding the European Baccalaureate or International Baccalaureate Certificate; or having completed secondary education in EU countries or countries that have signed the corresponding specific bilateral agreements with Spain; or having foreign studies validated by the Spanish Ministry as equivalent to the Spanish Bachillerato; or having passed the University Entrance Tests or Procedures for people over 25, 40 or 45 years old.

Candidates fulfilling the above requirements wishing to raise their entrance marks (not applicable for candidates wishing to enter to the University by holding a completed University degree, those passing of the University Tests for people over 25, 40 or 45 years old, or holding a validated Baccalaureate Studies) can optionally pass during the University Entrance Examination an assessment test in up to 4 extra subjects. It is advisable to consult the weighting parameters of each subject for each Degree and the requirements and deadlines to participate in the different pre-registration procedure phases: Foreign Students Phase (March), Ordinary Phase (June) and Extraordinary Phase (September).

Further information on the website of the Andalusian Single District:
<http://www.juntadeandalucia.es/economiaconocimiento/sguit/?q=grados>

YOU CAN FIND MORE INFORMATION AT



<http://www.us.es>

<http://estudiantes.us.es>

<http://cat.us.es>

<http://guiadeestudiantes.us.es>

<https://www.informatica.us.es/>

http://www.us.es/estudios/grados/plan_205

YOU CAN FIND US IN



Higher Technical School of Computer Engineering.

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Higher Technical School of Computer Engineering
Escuela Técnica Superior de Ingeniería Informática



ENGINEERING AND ARCHITECTURE

UNDERGRADUATE DEGREE
IN COMPUTER SCIENCE -
SOFTWARE ENGINEERING

GRADO EN INGENIERÍA
INFORMÁTICA - INGENIERÍA
DEL SOFTWARE



DESCRIPTION

This degree trains specialized professionals in the planning and management of projects, the requirements analysis, the configuration design, testing and management, and the life cycle of software.

Software is a computer program that helps the user to carry out certain tasks. Virtually every time we use a computer or even a mobile phone or a video game console we are using software. Examples of software include Facebook and WhatsApp, video games and word processors, a photo retouching program or a website for ticket sales of a concert. The complexity of these systems makes software increasingly difficult to design and develop. A software engineer is the person who knows the most sophisticated methodologies, techniques and development tools, and is capable of designing and directing advanced and quality software developments.

General Structure		Credits
Core		60
Compulsory		138
Optional		30
External Practice	Obligatory Practical Training (6 months)	Not Applicable
	Internships (Optional)	6.00
Final Degree Project		12

Course	Unit	Credits	Type
FIRST	Business Management	6	Basic Training
	Linear and Numerical Algebra	6	Basic Training
	Infinitesimal Calculus and Numerical Analysis	6	Basic Training
	Digital Electronic Circuits	6	Basic Training
	Statistics	6	Basic Training
	Computer Structure	6	Basic Training
	Fundamentals of Programming	12	Basic Training
	Fundamentals of Physics for Computer Science	6	Basic Training
	Introduction to Discrete Mathematics	6	Basic Training
	SECOND	Analysis and Design of Data and Algorithms	12
Introduction to Software Engineering and Informations Systems 1		6	Compulsory
Introduction to Software Engineering and Informations Systems 2		6	Compulsory
Computational Logic		6	Compulsory
Computer Networks		6	Compulsory
Operating Systems		6	Compulsory
Computer Architecture		6	Compulsory
Architecture and Integration of Software Systems		6	Compulsory
Discrete Mathematics		6	Compulsory
THIRD		Design and Testing 1	6
	Design and Testing 2	6	Compulsory
	Software Process and Management 1	6	Compulsory
	Software Process and Management 2	6	Compulsory
	Requirements Engineering	6	Compulsory
	Modeling and Numerical Simulation	6	Compulsory
	Multimedia Signal Processing	6	Compulsory
	Network Architecture and Services	6	Compulsory
	Artificial Intelligence	6	Compulsory
	Modeling and Graphical Visualization	6	Compulsory
FOURTH	Supervised Training	6	Optional
	Intelligent Information Access	6	Optional
	Advanced Business Management	6	Optional
	Applied Soft Computing	6	Optional
	Cryptography	6	Optional
	Information Technology Law	6	Optional
	Software Evolution and Configuration Management	6	Compulsory
	Production Management	6	Optional
	Quantitative Methods in Management	6	Optional
	IT Project Planning and Management	6	Compulsory
	Technology, Computers and Society	6	Optional
	Complements of Databases	6	Optional
	Computational Statistics	6	Optional
	Software Engineering: Professional Praxis	6	Compulsory
	Integration of Physical and Computer Systems	6	Optional
	System Optimization	6	Optional
	Digital Image Processing	6	Optional
	Computer and Internet Security	6	Optional
Remote sensing	6	Optional	
Bachelor's Thesis	12	Degree Project	

PROFESSIONAL OPPORTUNITIES

This degree provides qualification for the exercise of the profession of Technical Engineer in Computer Science; these professionals can develop their activity in companies of the sector of Information and Communication Technologies (ICT) in Software Development, IT Consulting, and Technology Support activities. They are also able to occupy positions in companies not related to ICT, in sectors such as Company Services, Industry and Construction, Education, Culture, Research, Health, Social Assistance, Financial Institutions and Insurers, and Public Administration. These positions include: Database Administrator, Head of Networks and Systems, Head of Security of Information Systems or Micro-informatics, Project Manager, Functional Analyst, Area Manager, Consultant, Database Architect, Quality Manager, Systems Architect, Director of Information Systems, Development Manager, Production and Operations Manager, and Head of Information Technology, and especially in those positions closely related to the development of software.

FURTHER STUDIES

The completion of this degree provides preferential access to following Master's Degrees: Computer Engineering; Logic, Software Engineering and Technology; Computation and Artificial Intelligence; Management of Communication and Information Technologies; Mathematics; Microelectronics: Design and Applications of Micro/Nanometric Systems (Online); Intelligent Systems for Energy and Transport (USE-UMA); Teaching in Secondary Schools, Vocational Training and Language Centers (Computer Sciences / Technology and Industrial Processes / Mathematics); Tourism Management and Planning.