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/economiayconocimiento/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_204

YOU CAN FIND US IN

Higher Technical School of Computer Engineering.

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Correo-e.: info-eii@listas.us.es

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

ENGINEERING AND ARCHITECTURE

UNDERGRADUATE DEGREE IN COMPUTER SCIENCE - COMPUTER ENGINEERING

GRADO EN INGENIERÍA INFORMÁTICA - INGENIERÍA DE COMPUTADORES

ANDALUCÍA TECH
International Campus of Excellence

UNIVERSIDAD DE SEVILLA

DESCRIPTION

This degree trains professionals specialized in the science and technology of design, in construction and maintenance of hardware, and in communication networks of modern computer systems and computer-controlled equipment, as well as in the associated system software.

Computer Engineering has a marked multidisciplinary character. Today, industry needs the design of computers and integrated circuits to monitor and control the manufacture of products. Any computer system (data processing centres, mobile phones, or PCs) can contain several microprocessors and various networks and communication buses: Ethernet, Bluetooth, Wifi, etc. These systems require the hardware and software to be highly integrated. The computer engineer has to decide which parts will be implemented in hardware, which in software, which networks should be used, and under what conditions they should work: low consumption, small size, security and recovery in case of failures, etc.

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	Compulsory
	Introduction to Software Engineering and Informations Systems 1	6	Compulsory
	Introduction to Software Engineering and Informations Systems 2	6	Compulsory
	Digital Systems Design	6	Compulsory
	Operating Systems	6	Compulsory
	Computer Technology	6	Compulsory
	Computer Architecture	6	Compulsory
	Discrete Mathematics	6	Compulsory
	Computer Networks	6	Compulsory
THIRD	Network Architecture and Technology	12	Compulsory
	Artificial Intelligence	6	Compulsory
	Peripherals and Interfaces	6	Compulsory
	Parallel and Distributed Systems	6	Compulsory
	Graph Theory	6	Compulsory
	Distributed Application Development	6	Compulsory
	Computational Geometry	6	Compulsory
	Embedded and Real-Time Systems I	6	Compulsory
	Systems Software	6	Compulsory
FOURTH	Supervised Training	6	Optional
	Cryptography	6	Optional
	Computational Statistics	6	Optional
	Fiabilidad y Tolerancia a Fallos	6	Optional
	Production Management	6	Optional
	Hardware Development Lab	6	Compulsory
	IT Project Planning and Management	6	Compulsory
	Digital Signal Processing	6	Optional
	Computer and Internet Security	6	Optional
	Embedded and Real-Time Systems II	6	Compulsory
	Technology, Computers and Society	6	Optional
	Intelligent Information Access	6	Optional
	Applied Soft Computing	6	Optional
	Integration of Physical and Computer Systems	6	Optional
	Application-Specific Hardware Plattforms	6	Optional
	Digital Image Processing	6	Optional
	Robotics and Automation	6	Optional
	Data Acquisition and Control Systems	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 hardware and networks.

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.