

Teaching guide

IDENTIFICATION DETAILS

Degree:	Computer Engineering		
Field of Knowledge:	Engineering and Architecture		
Faculty/School:	Senior Polytechnic School		
Course:	COMPUTER ARCHITECTURE AND ORGANISATION		
Type:	Compulsory	ECTS credits:	6
Year:	2	Code:	3617
Teaching period:	Third semester		
Area:	Computers and Systems		
Module:	IT core subject		
Teaching type:	Classroom-based		
Language:	Spanish		
Total number of student study hours:	150		

SUBJECT DESCRIPTION

The Computer Architecture and Organisation course provides an overview of the structure and operation of a computer and of the different components from which it is made: processor, system memory and peripheral devices. It also enables students to develop low-level applications for a given processor and acquire the ability to learn new languages and development environments for other different processors or microcontrollers.

SKILLS

Basic Skills

Students must have demonstrated knowledge and understanding in an area of study that is founded on general secondary education. Moreover, the area of study is typically at a level that includes certain aspects implying knowledge at the forefront of its field of study, albeit supported by advanced textbooks

Students must be able to apply their knowledge to their work or vocation in a professional manner and possess skills that can typically be demonstrated by coming up with and sustaining arguments and solving problems within their field of study

Students must have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgments that include reflections on pertinent social, scientific or ethical issues

Students must be able to convey information, ideas, problems and solutions to both an expert and non-expert audience

Students must have developed the learning skills needed to undertake further study with a high degree of independence

General Skills

An ability to define, assess and choose hardware and software platforms for the development and execution of computer applications, services and systems.

An ability to conceive and develop computer systems or architectures that are centralised or distributed, integrating hardware, software and networks.

Knowledge of the basic materials and technologies, giving rise to learning and the developing of new methods and technologies, and which also provide huge versatility to adapt to new contexts.

Specific skills

Ability to be familiar with, understand and assess the structure and architecture of computers, as well as their basic components.

DISTRIBUTION OF WORK TIME

CLASSROOM-BASED ACTIVITY	INDEPENDENT STUDY/OUT-OF-CLASSROOM ACTIVITY
67 hours	83 hours