

# Teaching guide

## IDENTIFICATION DETAILS

Degree:	Computer Engineering		
Field of Knowledge:	Engineering and Architecture		
Faculty/School:	Senior Polytechnic School		
Course:	OPERATING SYSTEMS II		
Type:	Compulsory	ECTS credits:	6
Year:	2	Code:	3632
Teaching period:	Fourth 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 Operating Systems II course is intended to provide an extension of formal knowledge on the main functions of an operating system, together with some aspects of its structure and design. The course addresses design and implementation based on the principles of concurrent programming, using the operating system's services to do so.

## 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 design, develop, assess and guarantee the accessibility, ergonomics, usability and security of computer applications, services and systems, and the information managed therein.

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, develop and maintain computer applications, services and systems using software engineering methods as an instrument to ensure quality.

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

### Specific skills

Knowledge of the characteristics, functionalities and structure of operating systems and an ability to design and implement applications based on their services.

Knowledge and application of the basic principles and techniques of parallel, concurrent, distributed and real-time programming.

### DISTRIBUTION OF WORK TIME

CLASSROOM-BASED ACTIVITY	INDEPENDENT STUDY/OUT-OF-CLASSROOM ACTIVITY
68 hours	82 hours