

Teaching guide

IDENTIFICATION DETAILS

Degree:	Computer Engineering		
Field of Knowledge:	Engineering and Architecture		
Faculty/School:	Senior Polytechnic School		
Course:	COMPUTER SECURITY		
Type:	Compulsory	ECTS credits:	6
Year:	4	Code:	3656
Teaching period:	Seventh semester		
Area:	Software Engineering		
Module:	Specific Technology		
Teaching type:	Classroom-based		
Language:	Spanish		
Total number of student study hours:	150		

SUBJECT DESCRIPTION

Information systems are an essential part of the daily management of organisations. The continuity of operations depends largely on the systems in which information is processed and the knowledge and know-how of companies are concentrated. The security of information systems is therefore an important part of any design, development or maintenance that may be undertaken, which raises the question of how to provide security to infrastructures and services associated with information processing and communications technology.

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 conceive, draft, organise, plan, develop and execute projects in the field of computer engineering whose purpose is to conceive, develop or exploit computer applications, services and systems.

An ability to analyse and assess the social and environmental impact of technical solutions, understanding the ethical and professional responsibility of the activity of a technical computer engineer.

Knowledge and application of the basic elements of economics and management of human resources, project organisation and planning, and legislation, regulations and standardisation in the field of computer projects.

An ability to direct activities linked to computer projects.

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.

An ability to solve problems with initiative, with effective decision-making, independence and creativity. Capacity for being able to communicate and convey knowledge and skills of the technical computer engineering profession.

Specific skills

An ability to develop, maintain and assess software services and systems that meet all user requirements, are reliable and efficient, are affordable to develop and maintain and meet quality standards, applying software engineering theories, principles, methods and practices.

An ability to identify and analyse problems and design, develop, implement, verify and document software solutions based on suitable knowledge of current theories, models and techniques.

An ability to identify, assess and manage potential associated risks that may arise.

DISTRIBUTION OF WORK TIME

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