1. General information

Course: NETWORK SECURITY		**Code:** 42340	
Type: ELECTIVE		**ECTS credits:** 6	
Degree: 406 - UNDERGRADUATE DEGREE IN COMPUTER SCIENCE AND ENGINEERING (AB)		**Academic year:** 2022-23	
Center: 604 - SCHOOL OF COMPUTER SCIENCE AND ENGINEERING (AB)		**Group(s):** 16	
Year: 4		**Duration:** First semester	
Main language: Spanish		**Second language:** English	
Use of additional languages:		**English Friendly:** Y	
Web site:		**Bilingual:** N	

Lecturer: **JOSE LUIS MARTINEZ MARTINEZ** - Group(s): **16**

Building/Office	Department	Phone number	Email	Office hours
ESII-1.C.11	SISTEMAS INFORMÁTICOS	2294	joseluis.martinez@uclm.es	

2. Pre-Requisites

Mandatory subject for the Specific Technology of Computer Engineering Subject, it is advisable to have completed the Basic Training modules and the Common module to the Computing Branch (Modules I and II). It is therefore recommended to have clear the basic

3. Justification in the curriculum, relation to other subjects and to the profession

This subject is part of the subject Specific Technology of Computer Engineering, within the intensification of Computer Engineering. It is a compulsory subject to obtain the mention corresponding to the aforementioned intensification.

Helps to reach one of the capacities that the graduates in Computer science of the UCLM must have, in particular, the capacity [IC6]: Ability to understand, apply and manage the guarantee and security of the computer systems.

The contents covered in this subject are closely related to those of other subjects taught in the plan, such as Computer Networks I, Computer Networks II, Network Design and Management, Wireless Devices and Networks, Cryptography, Information Systems Audit, C

4. Degree competences achieved in this course

Course competences

Code	Description
IC06	Ability to understand, apply, and manage the reliability and safety of digital systems.
INS01	Analysis, synthesis, and assessment skills.
INS02	Organising and planning skills.
INS04	Problem solving skills by the application of engineering techniques.
PER02	Ability to work in multidisciplinary teams.
SIS01	Critical thinking.
SIS03	Autonomous learning.
SIS05	Creativity.

5. Objectives or Learning Outcomes

Course learning outcomes

Description
Ability to explain and apply the security principles needed to protect a network and the devices in it.
Ability to design, set up and configure secure remote access.

6. Units / Contents

Unit 1:
   Unit 1.1
   Unit 1.2
Unit 2:
   Unit 2.1
   Unit 2.2
   Unit 2.3
Unit 3:
   Unit 3.1
   Unit 3.2
   Unit 3.3
Unit 4:
   Unit 4.1
   Unit 4.2
   Unit 4.3
   Unit 4.4
   Unit 4.5
Unit 5:
   Unit 5.1
   Unit 5.2

7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description
Class Attendance (theory) [ON-SITE]	Combination of methods	IC06 INS01 SIS01	1.04	26	Y	N	
Class Attendance (practical) [ON-SITE]	Practical or hands-on activities	IC06 SIS01	1.2	30	Y	N	
Project or Topic Presentations [ON-SITE]	Group Work	IC06 INS01 INS02 INS04 PER02 SIS01 SIS03 SIS05	0.12	3	Y	N	
Final test [ON-SITE]	Problem solving and exercises		0.2	5	Y	Y	
On-line Activities [OFF-SITE]	Assessment tests	IC06 SIS01 SIS05	0.16	4	Y	N	
Writing of reports or projects [OFF-SITE]	Self-study	IC06 INS01 INS02 INS04 PER02 SIS01 SIS03 SIS05	0.8	20	Y	N	
Study and Exam Preparation [OFF-SITE]	Self-study	INS01 INS02 INS04	2.48	62	Y	N	
Total:			**6**	**150**			
Total credits of in-class work: 2.56						Total class time hours: 64	
Total credits of out of class work: 3.44						Total hours of out of class work: 86	

As: Assessable training activity
Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

8. Evaluation criteria and Grading System

Evaluation System	Continuous assessment	Non-continuous evaluation*	Description
Final test	25.00%	50.00%	
Final test	25.00%	50.00%	
Progress Tests	50.00%	0.00%	
Total:	**100.00%**	**100.00%**	

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject , an ordinary and an extraordinary one (evaluating 100% of the competences).

9. Assignments, course calendar and important dates

Not related to the syllabus/contents

Hours	hours
Project or Topic Presentations [PRESENCIAL][Group Work]	3
Final test [PRESENCIAL][Problem solving and exercises]	5
On-line Activities [AUTÓNOMA][Assessment tests]	4
Writing of reports or projects [AUTÓNOMA][Self-study]	10

Unit 1 (de 5):

Activities	Hours

Class Attendance (theory) [PRESENCIAL][Combination of methods]	4
Study and Exam Preparation [AUTÓNOMA][Self-study]	2

Unit 2 (de 5):

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Combination of methods]	7
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	7
Writing of reports or projects [AUTÓNOMA][Self-study]	4
Study and Exam Preparation [AUTÓNOMA][Self-study]	15

Unit 3 (de 5):

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Combination of methods]	4
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	4
Writing of reports or projects [AUTÓNOMA][Self-study]	4
Study and Exam Preparation [AUTÓNOMA][Self-study]	10

Unit 4 (de 5):

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Combination of methods]	11
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	12
Writing of reports or projects [AUTÓNOMA][Self-study]	2
Study and Exam Preparation [AUTÓNOMA][Self-study]	16

Unit 5 (de 5):

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Combination of methods]	4
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	4
On-line Activities [AUTÓNOMA][Assessment tests]	2
Writing of reports or projects [AUTÓNOMA][Self-study]	2
Study and Exam Preparation [AUTÓNOMA][Self-study]	14

Global activity

Activities	hours
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	27
Project or Topic Presentations [PRESENCIAL][Group Work]	3
Final test [PRESENCIAL][Problem solving and exercises]	5
On-line Activities [AUTÓNOMA][Assessment tests]	6
Writing of reports or projects [AUTÓNOMA][Self-study]	22
Study and Exam Preparation [AUTÓNOMA][Self-study]	57
Class Attendance (theory) [PRESENCIAL][Combination of methods]	30
Total horas: 150	

10. Bibliography and Sources

Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
William Stallings	Fundamentos de seguridad en redes : aplicaciones y estándares	Prentice Hall			2003	
varios	Colección Pack Completa http://0xword.com/es/	0xword				Colección de varios ejemplares