

TELEMATICS ENGINEERING B. Eng.

ELECTIVE COURSES TYPE
INTERNSHIP AND MOBILITY

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Internship 3

Mobility 5

Year 2015/16

Course Name:	Internship	Course Code:	595030275; 595030276; 595030277; 595030278 595030279
Year:	3 / 4	Semester:	6, 7, 8
Credits (ECTS):	3; 4,5; 6; 9; 12	Credit Hours:	2; 3; 4; 6; 8
Area:	Elective	Type:	Elective / Internship
Term:	Fall / Spring	Language:	Spanish / English
Prerequisites / Co-requisites:		120 ECTS passed	
Coordinator:		Vice Dean International Relationships	
Bachelor Engineering Program:		Telematics Engineering Communications Electronics Engineering Telecommunication Systems Engineering Sound and Image Engineering	

ABET Student Outcomes

- (b) An ability to design and conduct experiments, as well as to analyze and interpret data
- (c) An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- (d) An ability to function on multidisciplinary teams
- (e) An ability to identify, formulate, and solve engineering problems
- (f) An understanding of professional and ethical responsibility
- (g) An ability to communicate effectively
- (h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- (i) A recognition of the need for, and an ability to engage in life-long learning
- (j) A knowledge of contemporary issues
- (k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Study Outcomes (according to the Spanish program definition)

- CG 02 Ability to express oneself in oral and written form, and to convey information through documents and public presentations..
- CG 04 Ability to abstract, analyze, and synthesize, and to solve problems.
- CG 05 Ability for teamwork in multidisciplinary environments.
- CG 07 Ability to design, manage, and direct projects.
- CG 10 Ability to handle specifications, rules and regulations and to apply them in the practice of the profession.
- CB 05 Adequate knowledge of the concept of a company, and the institutional and legal framework of businesses. Business management. Marketing.

CE TEL02	Ability to use applications of communication and computer (office automation, databases, advanced calculus, management of projects, visualization...) to support the development and utilization of nets, services and applications of telecommunication and electronics.
CE TEL06	Knowledge and use of the principles of programming in telecommunication networks, systems and services. Continuous improvement, as well as knowing their economic and social impact.
CE TEL08	Knowledge and use of the principles of programming in telecommunication networks, systems and services.
CE TEL10	Ability to analyze and design combinational and sequential circuits, synchronous and asynchronous, and to use microprocessors and integrated circuits.
CE EC	Will be include specific competences that were developing during the internship period.

Specific outcomes of instruction (according to the Spanish program definition)

- 1.- Contribute to the students integral formation as complement to their theoretical and practical learning
- 2.- Facilitate knowledge of the appropriate methodology to the professional reality in which students will have to operate, contrasting and applying the knowledge acquired
- 3.- Promote the development of technical, methodological, personal and participatory skills.
- 4.- Get a practical experience that facilitates the insertion in the labour market and improve their future employability..
- 5.- Promote the values of innovation, creativity and entrepreneurship.
- 6.- Contribute to the integral formation of the students as complement to their theoretical and practical learning.
- 7.- Facilitate knowledge of the appropriate methodology to the professional reality in which students will have to operate, contrasting and applying the knowledge acquired.
- 8.- Promote the development of technical, methodological, personal and participatory skills.
- 9.- Get a practical experience that facilitates the insertion in the labour market and improve their future employability.

Year 2015/16

Course Name:	Mobility	Course Code:	595030280; 595030281; 595030282; 595030283; 595030284; 595030285; 595030286
Year:	3 / 4	Semester:	6; 7; 8
Credits (ECTS):	3; 4,5; 6	Credit Hours:	2; 3; 4
Area:	Elective	Type:	Elective / Mobility
Term:	Fall / Spring	Language:	Spanish / English / Others
Prerequisites / Co-requisites:		120 ECTS passed	
Coordinator:		Vice Dean International Relationships	
Bachelor Engineering Program:		Telematics Engineering Communications Electronics Engineering Telecommunication Systems Engineering Sound and Image Engineering	

ABET Student Outcomes

- (a) An ability to apply knowledge of mathematics, science, and engineering
- (b) An ability to design and conduct experiments, as well as to analyze and interpret data
- (d) An ability to function on multidisciplinary teams
- (f) An understanding of professional and ethical responsibility
- (g) An ability to communicate effectively
- (i) A recognition of the need for, and an ability to engage in life-long learning
- (k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Study Outcomes (according to the Spanish program definition)

- CG 02 Ability to express oneself in oral and written form, and to convey information through documents and public presentations..
- CG 03 Skilled for public speaking and in written and communicating information throughout documents and public speeches.
- CG 04 Ability to abstract, analyze, and synthesize, and to solve problems.
- CG 05 Ability for teamwork in multidisciplinary environments.
- CG 12 Skills for interpersonal relations and work in a national and international context, with the ability to express in oral and written English.
- CG 13 Learning skills with a high degree of autonomy.

Specific outcomes of instruction (according to the Spanish program definition)

- 1.- Handling of the instrumentation and procedures for a basic laboratory of communication

systems, (generator/oscilloscope and Spectrum Analyzer RF modulator).

- 2.- Identify the rules and regulations of application to engineering projects in a determined field.
- 3.- Knowledge of the peculiarities of the telecommunication project.
- 4.- Work on shared projects.
- 5.- Representation of the frequency response.
- 6.- Ability to design, analyze and measure a wireline access network in residential environments.
- 7.- Ability to design, analyze and implement signal of TV (SMATV) distribution networks.
- 8.- Ability to design, management and the management of ICT projects.