

Program	59EC – Communications Electronic Engineering B. Eng. 59SC – Telecommunications Systems Engineering B. Eng. 59SO – Sound and Image Engineering B.Eng. 59TL – Telematics Engineering B. Eng. 59ID – Data Engineering & Systems B. Eng.
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Course number and name	
Number	595000040, 595000340, 595000140, 595000240, 595000599
Name	Final Degree Project
Semester	S1 [(September-January)] & S2 [(February-June)]

Credits and contact hours	
ECTS Credits	12
Contact hours	300-360

Coordinator's name	--
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Specific course information	
Description of course content	
<p>The Final Degree Project (PFG) is defined as an engineering work, from a professional point of view, carried out individually by each student under a teacher's supervision. As a capstone course of the Bachelor studies, the main goal of the PFG is the demonstration and application of the knowledges and skills acquired along the degree.</p> <p>The student needs to write the work on a report and to defend it in a public event.</p> <p>The PFG have a significant design component: it is performed under realistic conditions and limitations, and it applies standards and regulations properly. In addition the student needs to prove some creativity and originality to solve real problems, to develop ideas, models or prototypes, to carry out technical studies, etc.</p> <p>The topic of the PFG is appropriate to the student academic profile. For incoming students, the Mobility Office will support them to find a supervisor. For this reason they need to add a statement of purpose where they explain their studies (specialization, year, level) and the topic/s they would like to work. This statement and the Transcript of Records will be forwarded to the Departments/Research Groups more linked to the proposed topics.</p> <p>A pre-project needs to be uploaded by the student to the intranet to be validated by an Academic Committee. The deadlines for this submission are established for each term (October and March, approx.).</p>	
List of topics to be covered	
<ul style="list-style-type: none"> To apply the mathematics, science and/or engineering concepts and skills acquired throughout the degree. 	

- To identify, formulate and solve complex engineering problems.
- To design a device, system or process considering technical, economic and social limitations.
- To identify the appropriate information resources and to extend this skill thanks to an autonomous learning.
- To know the codes of good professional practices.
- To design and carry out tests, simulations or experiments for analyzing and interpreting data and results and for reaching conclusions.
- To use the appropriate techniques, skills, tools and equipment for engineering practice (design, simulation, validation...).
- To consider the ethical and professional responsibility in engineering and its impact on any area (respect and adaptation to rules and regulations, punctuality, diligence, plagiarism, references...).
- To identify and assess the effects of the solution to the engineering problem in global, economic, environmental and social contexts.
- To know the project management practices (such as risk or change management) and understand their limitations.
- To cite and reference the bibliographic resources properly.
- To use a clear, concise and error-free language in writing the report which allows an easy comprehension.
- To organized the report correctly, with an appropriate structure and formats.
- To justify the proposals and decisions. To respond to the questions with well-founded arguments.
- The student has held meetings with the tutor, has developed a defined work plan and the results and proposals have been original.
- To carry out an autonomous learning.

Specific goals for the course

Specific outcomes of instruction

- To explain orally or in writing the solutions proposed to resolve a problem.
- To identify and use the most appropriate Information and Communications Technology tools to propose and build solutions to problems.
- To develop and propose creative solutions applying scientific and engineering methods for the definition and resolution of problems, formalizing the objectives sought and considering the available resources.
- To organize, plan and manage engineering projects, proposing appropriate solutions and identifying risks, quality and economic impact.
- To analyze the environmental and social impact of an engineering project.
- To propose and implement solutions and projects aimed at social challenges based on corporate social responsibility (CSR) and sustainable development objectives (SDG).
- To work responsibly respecting the ethical framework.

Further reading and supplementary materials

– Guide for the students to write the report.