

Program	09TT- Engineering in Telecommunication Technologies and Services
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Course number and name	
Number	95000068
Name	Consumer Electronics Electrónica de Consumo
Semester	Y4-S8

Credits and contact hours	
ECTS Credits	3
Contact hours	26

Coordinator's name	Francisco J. López Hernández
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Specific course information		
Description of course content		
A course on specific aspects of designing, prototyping, manufacturing, and distributing electronic devices and systems for consumer markets.		
List of topics to be covered		
1. Low energy, battery powered devices, 2. Sensors and actuators, 3. Home systems, 4. Illumination		
Prerequisites or co-requisites		
Electronic design, prototyping and testing. Use of CAD tools.		
Course category in the program		
<input type="checkbox"/> R (required)	<input checked="" type="checkbox"/> E (elective)	<input type="checkbox"/> SE (selective elective)

Specific goals for the course	
Specific outcomes of instruction	
RA70. Knowledge of electronic devices, circuits, equipment and systems. RA71. Knowledge of the techniques for the design of electronic circuits RA75. Ability for the specification, implementation, documentation and use of electronic equipment and systems. RA77. Ability for the design of interface devices, data acquisition and storing, and terminals for electronic services and systems.	
Student outcomes addressed by the course	
CG2, CG3, CG4, CG7, CG8, CG9, CG10, CG12 CE-SE3, CE-SE4, CE-SE5, CE-SE6, CE-SE8	

Bibliography and supplemental materials

An important part of the students' work is searching and looking for information and documentation. Starting from brief guidelines, the students, working in groups with specific roles, must find the information needed for the project development.

Teaching methodology

<u>X</u> lectures	<u>X</u> problem solving sessions	<u>X</u> collaborative actions	<u>X</u> laboratory sessions
Other:	Project-oriented course: after a brief presentation of the problem, the students should present a prototype, a study of device and parts sources and costs (for large quantities), PCB and mounting services, enclosures and distribution of the system under study.		