



1. Code: 35485 **Name:** Integration of telecommunication technologies and systems

2. Credits: 6,00 **–Lecture:** 3,00 **–Practice:** 3,00 **Type of Course:** Compulsory

Degree: 2314-Master's Degree in Telecommunication Engineering

Module: 2-Technology Management of Telecommunication Projects Module **Subject:** 4-Technology Management of Telecommunication Projects

University Center: SCHOOL OF TELECOMMUNICATIONS ENGINEERING

3. Coordinator: Ballester Merelo, Francisco José
Departament: ELECTRONIC ENGINEERING

4. References

5. Course Outline

Course objectives

In this course, students learn to design, deploy, coordinate and manage a Project of Telecommunications Engineering or Electronic Product.

Contextualization of the course

As an Telecom Engineer, the student needs to acquire the abilities of facing a professional project, together with the basis of making a company project analysis and presenting a business plan.

6. Recommended Prior Knowledge

(35486) Telecommunication projects management

7. Results

Fundamental results

G02(GE) The ability to lead the creation and installation of telecommunication systems while complying with current regulations ensuring quality service.

G03(GE) The ability to lead, organise, and supervise multidisciplinary teams.

GT1(ES) The ability to integrate technology and systems related to Telecommunications Engineering of a general nature, and in wider and multidisciplinary contexts like, for example, bioengineering, photovoltaic conversion, nanotechnology and telemedicine.

G11(GE) The ability to communicate (both orally and in writing) the conclusions, knowledge and final reasons behind them, to both a specialised and non-specialised audience in a manner that is clear and free from ambiguity.

G13(GE) The knowledge, understanding, and ability to apply the legislation necessary to carry out the role of Telecommunications Engineer.

G07(GE) The ability to launch, lead and manage the manufacturing processes of electronic and telecommunications equipment, guaranteeing the safety of people and assets, the final quality of products, and their standardisation.

UPV-Generic Student Outcomes

(3) Teamwork and leadership

- Activities carried out to achieve the student outcome
Project with at least other 2 students

- Assessment criteria

The group will present the road map of activities, with the role of every member of the group.

Every member will be continuously evaluated by the professor and the rest of the members of the group through the deploying of the project.

Specific Learning Outcomes

RA3.2 - Identifying roles and skills to operate in multidisciplinary teams with different professional profiles.

(4) Effective communication

- Activities carried out to achieve the student outcome
writing a job or report in their own or foreign language. Oral presentation in public in a foreign language
- Assessment criteria

Through a check list or rubric on aspects related to quality (spelling mistakes, punctuation marks, syntactically correct phrases, clarity in the presentation of concepts, introduction, development and adequate conclusions, use of figures and





7. Results

UPV-Generic Student Outcomes

graphs, design and layout, correctness and technical coherence, adequate treatment of the bibliography, etc.). Through a check list or rubric on aspects related to the quality of the presentation (ease of speech, clarity in the presentation of concepts, introduction, development and appropriate conclusions, correct answers to questions from the public, etc.) and as well as evaluation of the quality of the support material developed.

Specific Learning Outcomes

RA4.2 - Developing professional texts or scientific-technical reports according to the conventions of the discipline.

8. Syllabus

1. Technical projects of Communal Telecommunication Infrastructure in buildings
 1. Regulation in ICT. Project parts and phases
 2. Network topology
 3. Radio and TV broadcast service
 4. Telephone service
 5. Wideband service
 6. Examples of planning in ICT networks
2. FTTH Project
 1. Basic concepts
 2. PON FTTP
 3. Access topology
 4. Network elements
 5. FTTP design
3. Electronic product development at telecommunication engineering.
 1. Introduction to technology and regulations for product development.
 2. The Technology Company.
 3. The process of manufacturing and marketing. Management suppliers.
 4. The Product design process.
 5. Financial results. Analysis. Models
4. Entrepreneurship and companies Seminar

9. Teaching and Learning Methodologies

<u>UN</u>	<u>LE</u>	<u>SE</u>	<u>PS</u>	<u>LS</u>	<u>FW</u>	<u>CP</u>	<u>AA</u>	<u>CH</u>	<u>NCH</u>	<u>TOTAL HOURS</u>
1	6,00	--	--	--	--	6,00	--	12,00	25,00	37,00
2	6,00	--	--	--	--	6,00	--	12,00	25,00	37,00
3	12,00	--	--	--	--	12,00	--	24,00	50,00	74,00
4	6,00	--	6,00	--	--	0,00	--	12,00	5,00	17,00
TOTAL HOURS	30,00	--	6,00	--	--	24,00	--	60,00	105,00	165,00

UN: Unit. LE: Lecture. SE: Seminar. PS: Practical session. LS: Lab sessions. FW: Field work. CP: Computer-mediated practice. AA: Assessment activities. CH: Contact hours. NCH: Non contact hours.

10. Assessment

Outline

(14) Written test

(05) Academic work

Num. Acts Weight (%)

1	3
3	97

Evaluation method:

1. (7% of the final evaluation) Document in power point and 5 slides presentation about a new tech product idea.
2. (80% of the final evaluation) Document in word, project about one of the three subject interns:
 - a. ICT
 - b. FTTH
 - c. New electronic product Company
3. (10% of the final evaluation) Document in power point and 15 min presentation about the project
 - a. ICT
 - b. FTTH
 - c. New electronic product company
4. (3% of the final evaluation) Test about entrepreneur and companies seminar.





10. Assessment

In case of not overcome a qualification of 5 in CTI or EDP project, the student will have a second opportunity to present an improved work to obtain a better qualification in ten days from the publication of qualification.

In case of exemption of mandatory attendance, granted by CAT

The assessment of the course comprises the following parts:

- Entrepreneurship Seminars (3%) The student has to present a work about a new born Tech Company made by young entrepreneurs.

- Academic work (97 %), which are made up of the composition of the Project document, Project presentation in English . The student has to present 3 projects: One proposal about a tech product (5%), the complete project about EPD (Electronic Product Development) (46%) and a CTI project proposed by the lecturer (46%). In case of not overcome a qualification of 5 in CTI or EDP project, the student will have a second opportunity to present an improved work to obtain a better qualification in ten days from the publication of qualification.

All the works and projects will be done individually.

11. Absence threshold

<u>Activity</u>	<u>Percentage</u>	<u>Observations</u>
Lecture Theory	5	
Seminar Theory	5	
Lecture Practice	5	
Laboratory Practical	5	
Computer Practice	0	
Field Practice	0	

