

## Telecommunications Projects

2013/2014

Codi: 42846

Crèdits: 6

Titulació	Tipus	Curs	Semestre
4313797 Enginyeria de Telecomunicacions / Telecommunication Engineering	OB	1	2

### Professor de contacte

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### Utilització d'idiomes

Llengua vehicular majoritària: anglès (eng)

### Prerequisites

No previous requisites

### Objectius

This course aims to provide:

1. Systematic tools for planning, directing and managing projects in the field of Telecommunication Engineering
2. Knowledge, understanding and ability to apply the necessary legislation in the exercise of the profession of Telecommunications Engineering
3. An overview of the role that information and communication technologies can play in management and entrepreneurship.

### Competències

- Enginyeria de Telecomunicacions / Telecommunication Engineering
- Be capable to designing, directing, coordinating and managing the technical and economic aspects of projects on: telecommunications systems, networks, infrastructures and services including the supervision and coordination of partial project annexes (...)
  - Students should know how to apply the knowledge they have acquired and their capacity for problem solving in new or little known fields within wider (or multidisciplinary) contexts related to the area of study
  - Students should know how to communicate their conclusions, knowledge and final reasoning that they hold in front of specialist and non-specialist audiences clearly and unambiguously

### Resultats d'aprenentatge

1. Apply the principles of resource and project management as well as telecommunications legislation, regulation and normalisation.
2. Direct research, development and innovation projects in companies and technology centres
3. Direct telecommunications systems projects ensuring that the regulation in force is complied with to ensure the quality of the service.
4. Students should know how to apply the knowledge they have acquired and their capacity for problem solving in new or little known fields within wider (or multidisciplinary) contexts related to the area of study
5. Students should know how to communicate their conclusions, knowledge and final reasoning that they hold in front of specialist and non-specialist audiences clearly and unambiguously

## Continguts

1. Organizational structure and integrated project management
2. Planning and monitoring techniques
3. Quality Assurance
4. Management methodologies for information and communication technologies
5. The role of information and communication technologies in new bussiness models
6. Projects in the field of telecommunications: legislation, development, implementation and certificatio

## Metodologia

### Guided activities:

- In the class: explanation of theoretical contents with application examples
- In the lab: presentation and development of planned activities

### Autonomous activities:

- Individual study of the subject
- Preparation of lab activities, reports and presentations
- Work group: development of the proposed projects

### Supervised activities:

- Individual or group meetings to clarify concepts, advise on the development of the course or attend other specific issues.

## Activitats formatives

Títol	Hores	ECTS	Resultats d'aprenentatge
Tipus: Dirigides			
Lab classes	15	0,6	1, 2, 3, 4, 5
Theory classes	30	1,2	1, 2, 3, 4, 5
Tipus: Supervisades			
Supervision meetings	15	0,6	1, 2, 3, 4, 5
Tipus: Autònomes			
Group work	45	1,8	1, 2, 3, 4, 5
Personal work	25	1	1, 2, 3, 4, 5

## Avaluació

### Evaluation activities

Final exam (30%): theoretical concepts explained along the course

2 projects in group (35% + 35 %). Both projects have the same weight. In the evaluation of each project the following aspects will be taken into consideration:

- Subjective assessment by the teacher of the contribution of each student to the project (5%)
- Oral presentation of the project (10%)
- Written report of the project (20%)

The qualification "not shown " will be only granted if the student does not participate in any of the evaluation activities.

It is mandatory to pass all the evaluation activities (score  $\geq 5$ ) to pass the course.

## Activitats d'avaluació

Títol	Pes	Hores	ECTS	Resultats d'aprenentatge
Activity developed in tutorial and practical sessions	10%	2	0,08	1, 2, 3, 4, 5
Final exam	30%	3	0,12	1, 2, 3, 4, 5
Oral presentation of a project developed in a group	20%	3	0,12	1, 2, 3, 4, 5
Report of a project developed in a group	40%	12	0,48	1, 2, 3, 4, 5

## Bibliografia

References:

W.R. Duncan, A Guide to the Project Management Body of Knowledge, Project Management Institute. Four Campus Boulevard. PA, 2000.

T.C. Belanger, How to plan a project, Sterling Planning Group, 1999

C. Romero López, Técnicas de Programación y Control de Proyectos, Ediciones Pirámide, 1988

Tim Williams, "EMC. Control y Limitación de Energía Electromagnética", Editorial Paraninfo, 1996.

Alexander Osterwalder & Yves Pigneur, Business Model Generation, John Wiley & Sons, Inc., New Jersey, 2010

Links:

Legislación básica de telecomunicaciones en España:

<http://www.minetur.gob.es/telecomunicaciones/es-ES/Paginas/index.aspx>

Instituto para la Diversificación y Ahorro de la energía: <http://www.idae.es>

Colegio oficial de ingenieros de telecomunicación: <http://www.coit.es>

Col·legi d'Enginyers de Telecomunicació de Catalunya - Associació Catalana de Ingenieros de Telecomunicación: <http://www.telecos.cat>