Course guide
320125 - PE - Engineering Project Design

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 710 - EEL - Department of Electronic Engineering.
Degree: BACHELOR’S DEGREE IN AUDIOVISUAL SYSTEMS ENGINEERING (Syllabus 2009). (Compulsory subject).
Academic year: 2022  ECTS Credits: 6.0  Languages: Catalan, Spanish

LECTURER
Coordinating lecturer: Raúl Fernández

Others:

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
5. AUD_COMMON: Ability to get new knowledge and to learn new techniques appropriate to the conception, development and exploitation of telecommunication systems and services.

6. AUD_COMMON: Capacity to design, manage and organize Networks, systems, services and telecommunications infrastructures in residential (home, city communities and digital), corporate or institutional organizations, as well as inform of social and economic impacts. Knowledge of the regulations and the Regulation of Telecommunications in national, European and international ambits.

7. AUD_COMMON: Understand the national, European and international standards and legislation governing telecommunications.

Transversal:
1. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 3. Communicating clearly and efficiently in oral and written presentations. Adapting to audiences and communication aims by using suitable strategies and means.
3. SUSTAINABILITY AND SOCIAL COMMITMENT - Level 3. Taking social, economic and environmental factors into account in the application of solutions. Undertaking projects that tie in with human development and sustainability.
4. TEAMWORK - Level 3. Managing and making work groups effective. Resolving possible conflicts, valuing working with others, assessing the effectiveness of a team and presenting the final results.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Self study</td>
<td>90,0</td>
<td>60.00</td>
</tr>
<tr>
<td>Hours large group</td>
<td>30,0</td>
<td>20.00</td>
</tr>
<tr>
<td>Hours small group</td>
<td>30,0</td>
<td>20.00</td>
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</tbody>
</table>

Total learning time: 150 h
## TEMA 1: Legislation, regulations and policy areas of Telecommunications

### Description:
- Regulators on Telecommunications
- Professional Associations
- Professionals Attributions.
- Social Responsibility
- Individual Responsibility.
- Code of ethics.

### Specific objectives:
To know the main telecommunication regulatory and professional and social attributions.

### Related activities:
- Class theoretical explanation with exercises.
- Activity 1.
- Activity 2.

### Full-or-part-time: 25h
Theory classes: 10h  
Self study : 15h

## TEMA 2: Preparation and presentation of technical documentation.

### Description:
- Technical documentation.
- The Scientific article.
- The technical project.
- Oral presentations.

### Specific objectives:
Writing technical documentation

### Related activities:
- Theoretical explanation with exercises.
- Activity 1.

### Full-or-part-time: 25h
Theory classes: 10h  
Self study : 15h
TEMA 3: Project Management for Telecommunications

Description:
- Introduction.
- Project definition.
- Budget and Schedule.
- Project implementation.
- Project control.
- Sustainability
- Innovation

Specific objectives:
Project Management for Telecommunications

Related activities:
- Class exercises with theoretical explanations.
- Activity 1.
- Activity 2.

Full-or-part-time: 25h
Theory classes: 10h
Self study: 15h

TEMA 4: Common Telecommunications Infrastructure.

Description:
- Development of a Common Telecommunications Infrastructure project.
- Defining the scope of the project to make
- Editing documentation to be submitted

Specific objectives:
ICT Development Project

Related activities:
- Class exercises with theoretical explanations.
- Activity 1.
- Activity 2.

Full-or-part-time: 75h
Laboratory classes: 30h
Self study: 45h

ACTIVITIES

(ENG) ACTIVITAT 1: ELABORACIÓ D’UN PROJECTE DE TELECOMUNICACIONS

Full-or-part-time: 75h
Laboratory classes: 30h
Self study: 45h

(ENG) ACTIVITAT 2: PROVA FINAL

Full-or-part-time: 35h
Theory classes: 14h
Practical classes: 21h
GRADING SYSTEM

- Documentation of an engineering project, weight: 40%
- Oral defense of an engineering project, weight: 10%
- Teamwork, weight: 10%
- Final exam, weight: 40%

The results with average mark lower than 5 can redirect by additional work submitted 48 hours advance of the assessment date. The maximum mark of this recovery work is 5.

For those students who meet the requirements and submit to the reevaluation examination, the grade of the reevaluation exam will replace the grades of all the on-site written evaluation acts (tests, midterm and final exams) and the grades obtained during the course for lab practices, works, projects and presentations will be kept.

If the final grade after reevaluation is lower than 5.0, it will replace the initial one only if it is higher. If the final grade after reevaluation is greater or equal to 5.0, the final grade of the subject will be pass 5.0.

BIBLIOGRAPHY

Basic: