Degree competences to which the subject contributes

**Generical:**

- Accessibility: Know and apply criteria of universal design in different products, environment and services.

**Transversal:**

- 04 COE N3. 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.
- 06 URI N3. EFFECTIVE USE OF INFORMATION RESOURCES - Level 3. Planning and using the information necessary for an academic assignment (a final thesis, for example) based on a critical appraisal of the information resources used.
- 05 TEQ N3. 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.
- 07 AAT N3. SELF-DIRECTED LEARNING - Level 3. Applying the knowledge gained in completing a task according to its
The aim is for students to consolidate skills obtained in the subjects of the degree by applying what he learned in real scenarios. Relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.

**Teaching methodology**

The aim is for students to consolidate skills obtained in the subjects of the degree by applying what he learned in (real, simulated) scenarios. Theoretical concepts will in order to put in context the framework and was the starting point for the analysis and design to realize. It will enhance the performance of work in multidisciplinary teams using project-based learning model and role playing.

**Learning objectives of the subject**

The aim is for students to consolidate skills obtained in the subjects of the degree by applying what he learned in real scenarios.

**Study load**

<table>
<thead>
<tr>
<th>Total learning time: 165h</th>
<th>Hours large group: 30h</th>
<th>18.18%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours medium group: 0h</td>
<td>Hours small group: 30h</td>
<td>18.18%</td>
</tr>
<tr>
<td>Guided activities: 0h</td>
<td>Self study: 105h</td>
<td>63.64%</td>
</tr>
</tbody>
</table>

# Content

## 1. Advanced Accessibility

**Learning time:** 10h  
Self study: 10h

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
</table>
| 1.1 Link between accessibility, ICT and Engineering  
1.2 Teamwork  
1.3 Example: Accessibility in Public Building  
1.4 Phases of a human-centred design process  
1.5 Accessible documentation |

**Related activities:**
The lecture reinforces aspects of documentation and development phases of a project useful to the practical part of the course.

**Specific objectives:**
Consolidate basic knowledge.

## 2. Project

**Learning time:** 34h  
Theory classes: 34h

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
</table>
| 2.1 Teamrol and preselected project-  
2.2 Requirements Analysis  
2.3 Conceptual Design  
2.4 Prototyping  
2.5 User Experience  
2.6 Project management |

**Related activities:**
Some laboratory sessions are designed that serve to support the project. The tools to be used in AL-116 are: Google forms, Google SketchUp, Justinmind Prototyper among others.

**Specific objectives:**
Specify, design and evaluate a project
3. Study Case: Technology for the quality of the living day

**Description:**
- 3.1 Home healthcare services
- 3.2 Assistive technology
- 3.3 Interaction with home automation systems
- 3.6 Interface design
- 3.7 Electronic devices
- 3.8 Programming

**Related activities:**
This case study is what will define the project list and offered the basis to issue the second project.

**Specific objectives:**
Create accessible scenarios at home using engineering solutions based on ICT

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**Planning of activities**

**Applied Accessibility Project**

**Learning time:** 2h
- Theory classes: 2h

**Hours:** 41h
- Laboratory classes: 15h
- Theory classes: 26h

**Description:**
The course is structured around (real, simulated) projects for organizations in the region or units of the university. It will enhance the performance of work in multidisciplinary groups.

**Support materials:**
Based on project requirements and resources available in the laboratory.

**Descriptions of the assignments due and their relation to the assessment:**
The Activities will be delivered and presented in the Theory classes.
The Practices will be delivered and presented in the Practices classes, and the final Internship Project will be delivered and presented the last week of the course.

**Specific objectives:**
Know how to apply and develop skills related to accessibility applied to group work and oral communication.

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**Qualification system**

The evaluation of the subject consists of three parts: Theory (40%), Activities (10%) and Practices (50%). For the Theory part, exams (40%), a partial exam and a final exam will be carried out in which the achievement of the contents developed in the subject will be assessed. The exam grade is obtained as: \( \text{Theory\ Note} = \max (0.4 \times \text{Ex\ Parcial} + 0.6 \times \text{Ex\ Final}; \text{Ex\ Final}) \), the Activities (10%) will be assessed individually in the Theory classes, and the evaluation of the practices (50%) based on the criteria: of difficulty and effort of the field work, the quality of the proposal presented in a technical report and the public presentation in class of the work done.

For the re-evaluation of the subject, a Final Exam of the theoretical module will be carried out.
Regulations for carrying out activities

The works must be original, technically feasible and reaching the goals set by users.

Bibliography

Basic:


Others resources:

Hyperlink

CEAPAT. Tecnologías y personas mayores
http://www.ceapat.es/InterPresent1/groups/imserso/documents/binario/reto_8.pdf

Computer material

Modelo de Proceso de la Ingeniería de la usabilidad y de la accesibilidad

Nom recurPatrick W. Roe. Towards an inclusive future, COST 219. 2007