220324 - Airport Infrastructure Management

Coordinating unit: 205 - ESEIAAT - Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 758 - EPC - Department of Project and Construction Engineering
Academic year: 2019
Degree: MASTER'S DEGREE IN SPACE AND AERONAUTICAL ENGINEERING (Syllabus 2016). (Teaching unit Optional)
MASTER'S DEGREE IN AERONAUTICAL ENGINEERING (Syllabus 2014). (Teaching unit Optional)
ECTS credits: 5
Teaching languages: English

Teaching staff

Coordinator: David Vives
Others: Blanca Tejedor, Miquel Casals

Degree competences to which the subject contributes

Specific:
- CEEAEROP1. MUEA/MASE: The ability to analyse airport operations, planning and air transport (specific competency for the specialisation in Airports).
- CEEAEROP2. MUEA/MASE: The ability to design and calculate airport installations (specific competency for the specialisation in Airports).
- CEEAEROP3. MUEA/MASE: The ability to apply analytical and business management techniques to aeronautical companies (specific competency for the specialisation in Airports).

Teaching methodology

The course is divided into parts:
Theory classes
Practical classes
Self-study for doing exercises and activities.

In the theory classes, teachers will introduce the theoretical basis of the concepts, methods and results and illustrate them with examples appropriate to facilitate their understanding.

In the practical classes (in the classroom), teachers guide students in applying theoretical concepts to solve problems, always using critical reasoning. We propose that students solve exercises in and outside the classroom, to promote contact and use the basic tools needed to solve problems.

Students, independently, need to work on the materials provided by teachers and the outcomes of the sessions of exercises/problems, in order to fix and assimilate the concepts.

The teachers provide the syllabus and monitoring of activities (by ATENEA).

Learning objectives of the subject
220324 - Airport Infrastructure Management

Study load

<table>
<thead>
<tr>
<th>Total learning time: 125h</th>
<th>Hours large group: 30h</th>
<th>24.00%</th>
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<tbody>
<tr>
<td></td>
<td>Hours small group: 15h</td>
<td>12.00%</td>
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<tr>
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<td>Self study: 80h</td>
<td>64.00%</td>
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Content

Module 1: Course introduction. Concepts

<table>
<thead>
<tr>
<th>Learning time: 40h</th>
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<tbody>
<tr>
<td>Theory classes: 10h</td>
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<tr>
<td>Practical classes: 5h</td>
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<tr>
<td>Self study: 25h</td>
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Description:

Related activities:
Exam and Coursework

Module 2: Audits, evaluation, planning and management of building systems and related services

<table>
<thead>
<tr>
<th>Learning time: 45h</th>
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<tbody>
<tr>
<td>Theory classes: 10h</td>
</tr>
<tr>
<td>Practical classes: 5h</td>
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<tr>
<td>Self study: 30h</td>
</tr>
</tbody>
</table>

Description:

Related activities:
Exam and Coursework

Module 3: Smart Building Systems

<table>
<thead>
<tr>
<th>Learning time: 40h</th>
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<tbody>
<tr>
<td>Theory classes: 10h</td>
</tr>
<tr>
<td>Practical classes: 5h</td>
</tr>
<tr>
<td>Self study: 25h</td>
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</tbody>
</table>

Description:

Related activities:
Exam and Coursework
The course will be evaluated continuously during the academic year through the coursework. Minimum three evaluation events (mainly case studies) will be proposed during the course. The evaluation weight of these events will be distributed minimum 20% and maximum 40% each, previously agreed with the students, and depending on the amount of work for each case. Initial bad results can be reconducted in successive events.

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:**