

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:	2018		
Degree:	MASTER'S DEGREE IN AERONAUTICAL ENGINEERING (Syllabus 2014). (Teaching unit Optional) MASTER'S DEGREE IN SPACE AND AERONAUTICAL ENGINEERING (Syllabus 2016). (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

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Study load

Total learning time: 125h	Hours large group:	30h	24.00%
	Hours small group:	15h	12.00%
	Self study:	80h	64.00%

Content

<p>Module 1: Course introduction. Concepts</p>	<p>Learning time: 40h</p> <p>Theory classes: 10h Practical classes: 5h Self study : 25h</p>
<p>Description: 1. Course introduction. Concepts. Vocabulary. Basis of smart buildings.</p> <p>Related activities: Exam and Coursework</p>	
<p>Module 2: Audits, evaluation, planning and management of buiding systems and related services</p>	<p>Learning time: 45h</p> <p>Theory classes: 10h Practical classes: 5h Self study : 30h</p>
<p>Description: 2. Protocols for audit and evaluate buiding performance. Planning and management of buiding systems. Management of related buiding services and service suppliers.</p> <p>Related activities: Exam and Coursework</p>	
<p>Module 3: Smart Building Systems</p>	<p>Learning time: 40h</p> <p>Theory classes: 10h Practical classes: 5h Self study : 25h</p>
<p>Description: 3. Smart systems description and definition. System Integration. Smart buidings performance.</p> <p>Related activities: Exam and Coursework</p>	

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Qualification system

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:

Sinopoli, Jim. Smart buildings systems for architects, owners and builders [on line]. Oxford: Butterworth-Heinemann, 2010 [Consultation: 29/06/2016]. Available on: <<http://www.sciencedirect.com/science/book/9781856176538>>. ISBN 9781856176538.