

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 Compulsory)		
ECTS credits:	10	Teaching languages:	English

Teaching staff Coordinator: Garcia Almiñana, Daniel - Course Coordinator Marta Roca Lefler - M1 Coordinator Others: Shelly Domenech, Alvaro Perez Llera, Luis Manuel

Timetable: send mail to daniel.garcia@upc.edu to agree a meeting

Prior skills

NONE

Requirements

MINIMUM ENGLISH LEVEL IS B2.2

Degree competences to which the subject contributes

Transversal:

CT3. TEAMWORK: Being able to work in an interdisciplinary team, whether as a member or as a leader, with the aim of contributing to projects pragmatically and responsibly and making commitments in view of the resources that are available.

CT5. FOREIGN LANGUAGE: Achieving a level of spoken and written proficiency in a foreign language, preferably English, that meets the needs of the profession and the labour market.

CT4. EFFECTIVE USE OF INFORMATION RESOURCES: Managing the acquisition, structuring, analysis and display of data and information in the chosen area of specialisation and critically assessing the results obtained.

Teaching methodology

- Interactive research seminars for MODULE 1.

- Master Class and Case Studies for MODULE 2.
- Teamwork for MODULE 3.

Learning objectives of the subject

SPECIFIC SKILLS

- Understanding of the concept of Integrated Project Management as a basic tool for the development of Projects in the Aerospace field.



- Understanding the knowledge areas of the PMBoK (Project Management Body of Knowledge).
- Practicing some of the Project Management Tools of the PMBOK.
- Understanding and practicing some research tools such as database and references management.
- Developing a research paper.
- Understanding and practicing some research tools such as database and references management.

GENERIC SKILLS

- Critical Thinking
- Solvent use of the resources of information
- Effective oral and written communication
- Teamworking

Study load

Total learning time: 250h	Hours large group:	60h	24.00%
	Hours medium group:	Oh	0.00%
	Hours small group:	30h	12.00%
	Guided activities:	Oh	0.00%
	Self study:	160h	64.00%



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Module 1: INFORMATION RESEARCH (all students)	Learning time: 27h Theory classes: 9h Guided activities: 9h Self study : 9h					
Description: LEARNING OF EFFECTIVE USE OF INFORMATION IN RESEARCH Related activities: Along the semester the students will be appointed to several intensive research modules that will be conducted at the Campus Library facilities: - Introduction to information research - Information sources and tools in aeronautics - Research databases (Web of Science and Scopus) - Information management (Mendeley) - Guidelines to elaborate, structure and write a master?s thesis The module is complemented by reading notes and support materials and the realization of various exercises and questionnaires * These seminars are compulsory for all students						
Module 2: PROJECT MANAGEMENT ?THEORY	Learning time: 58h Theory classes: 18h Self study : 40h					
Description: PMBOK FUNDAMENTALS Related activities: The students will learn the PMBOK Fundamentals for Project Management: - Integration Project Management. - Scope Management. - Scope Management. - Schedule Management. - Costs Management. - Procurement Management. - Procurement Management. - Quality Management. - Quality Management. - Risks Management. - Stakeholders Management. - Communications Management. - Communications Management. These activities will be practiced and assessed as Case Studies (in class) and Project Management Deliverables (in group).						



Module 3: PROJECT MANAGEMENT - TEAMWORK	Learning time: 165h Theory classes: 45h Self study : 120h					
Description: PROJECT MANAGEMENT PLAN FOR AN EU H2020 PROPOSAL						
Related activities: The students will be working in groups, under the supervision of one lecturer acting as a NATIONAL CONTACT POINT, in order to develop by the end of the semester a complete EU H2020 proposal in the field of Space. This project will be presented to a reviewing panel of experts highlighting: - The EXCELLENCE of the proposal - The expected IMPACT in case of success of the project - The IMPLEMENTATION strategy for the proposal (Project Management Plan using the PMBOK standard)						

Qualification system

The assessment will consist in:

- Final assessment for MODULE 1; 15%, splitted into at least 4 online questionnaries
- Continuous assessment of MODULE 2; 35% of the final course evaluation, splitted into at least 8 in-class assessment activities.

- Final assessment of MODULE 3; 50% of the final course evaluation, splitted into four concepts (18% preliminary group deliverables, 6,5% group presentation; 6,5% group documents, 18% individual work inside the group)

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.

Regulations for carrying out activities

According to the "Normativa Acadèmica de Grau i Màster" (NAGRAMA)

Bibliography

Basic:

A guide to the project management body of knowledge (PMBOK® guide). 5th ed. Pennsylvania: Project management Institute Inc, 2013. ISBN 9781935589679.