

1. BASIC INFORMATION

Subject	Aerospace propulsion systems
Degree	Degree in Aerospace Engineering of Aircraft
School	Escuela de Arquitectura, Ingeniería y Diseño
Course	4
ECTS	6 ECTS
Type	Optional
Language	English
Delivery mod	Face-to-face
Semester	First/Second
Academic year	2019/2020
Coordinator	

2. PRESENTATION

This course belongs to the “Materials and production II” module:

- Aerospace propulsion systems 6 ECTS (fourth year)
- Assurance of Product Quality for Space 6 ECTS (fourth year)
- Addendum to Materials and Production 6 ECTS (fourth year)

3. COMPETENCIES AND LEARNING OUTCOMES

Core competencies:

- CB1: That students have demonstrated knowledge and understanding in a field of study that part of the basis of general secondary education, and is usually found at a level that, while supported by advanced textbooks, includes some aspects that will knowledge of the forefront of their field of study.
- CB2: That students can apply their knowledge to their work or vocation in a professional manner and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study.
- CB3: That students have the ability to gather and interpret relevant data (usually within their field of study) to make judgments that include reflection on relevant social, scientific or ethical.
- CB4: To allow students to communicate information, ideas, problems and solutions both to a specialized and non-specialized audience.
- CB5: That students have developed those learning skills necessary to undertake further studies with a high degree of autonomy.

Cross-curricular competencies:

- CT15: Compile and interpret data to make judgments that include relevant social, scientist, and ethical issues, taking fundamental rights respect into consideration, as well as the democratic principles, gender equality, solidarity, environment protection, universal accessibility and design for all, and culture of peace (consultancy).
- CT16 (N3): To communicate and convey information, ideas and skills in the student's field of specialization, either in writing or orally, both to skilled and unskilled audiences (communication skills).
- CT17 (N2): Addressing the issues and challenges related to their area of expertise with flexibility, initiative, innovation, and dynamism (entrepreneurial profile).

Notes: UNIQUE LEVEL: Competence developed at one level. Level 1 (N1): awareness about the importance of competences and basic application of it to several situations. Level 2(N2): interiorization and skillful handling of competences. Level 3 (N3): Full interiorization and handling of competences at any needed situation.

Specific competencies:

- CE29. Specific knowledge about aerospace production systems (competence for students taking the corresponding optative subject).
- CE32. Ability to multidisciplinary work

Learning outcomes:

1. To develop a quality plan.
2. To elaborate the planning of a production system
3. To carry out studies about the technologies and the engineering procedures related to the skills of this module.
4. To conceptualize, from a series of requirements and prior information, an engineering problem, to propose the approach to solve it and to find the best solution. All this related to the skills of this module.
5. To transfer parts of an engineering problem to the laboratory, and use this resource as a support to solve it.

4. CONTENTS

- Advanced aerospace production systems
- Quality management (introduction to quality, regulations, quality plan, change management, implementation of a quality plan)
- Operations management (process management, supply chain, production planning)
- Introduction to innovation management
- Practical application to business cases in the aerospace sector

5. TEACHING-LEARNING METHODOLOGIES

The following table shows how the different types of activities are distributed and how many hours are assigned to each type:

Training Activities	hours
Lecture-based class	20
Integrative team work	60
Self-study	50
Mentoring, academic monitoring and assessment	20
TOTAL	150

6. ASSESSMENT

Listed below are the assessment systems used and the weight each one carries towards the final course grade:

Assessment criteria	Weight (%)
1. Exam, test and other type of assessment.	30%-35%
2. Reports, articles and informs.	15%-30%
3. Alternative system of assessment.	15%-30%
4. Conferences, company-tour visit and experiences in situ	10%-10%
6. Transversal skills (rubric)	10%-15%

When you access the course on the *Campus Virtual*, you'll find a description of the assessment activities you have to complete, as well as the delivery deadline and assessment procedure for each one.

6.1. First exam period

To pass the course in the first exam period, you must obtain a final course grade of at least 5 out of 10 (weighted average).

In order to be evaluated you must have a minimum of 50% attendance.

In the case, when the student do not reached the minimum required to pass any evaluable activity. The final grade will be:

- The mean average when the mean value is less than or equal to 4.

- 4 if the value of the mean average is greater than 4.

The grade will be considered as NP (Not Presented) when the student has not delivered any evaluable activity of which they are part of the weighted average.

6.2. Second exam period

To pass the course in the second exam period, you must obtain a final course grade of at least 5 out of 10 (weighted average).

In order to be evaluated you must have a minimum of 50% attendance.

In the case, when the student do not reached the minimum required to pass any evaluable activity. The final grade will be:

- The mean average when the mean value is less than or equal to 4.
- 4 if the value of the mean average is greater than 4.

The grade will be considered as NP (Not Presented) when the student has not delivered any evaluable activity of which they are part of the weighted average.

7. BIBLIOGRAPHY

Recommended bibliography will be updated.

8. DIVERSITY MANAGEMENT UNIT

Students with specific learning support needs:

Curricular adaptations and adjustments for students with specific learning support needs, in order to guarantee equal opportunities, will be overseen by the Diversity Management Unit (UAD: Unidad de Atención a la Diversidad).

It is compulsory for this Unit to issue a curricular adaptation/adjustment report, and therefore students with specific learning support needs should contact the Unit at unidad.diversidad@universidadeuropea.es at the beginning of each semester.