Universidad Europea
LAUREATE INTERNATIONAL UNIVERSITIES

Course Syllabus

Aerospace Production Systems

Year: 2018/2019
Code: 9966001805
Coordinating professor: Ignacio José Marquez López
Degree program: Degree in Aerospace Engineering of aircrafts
School: Arquitectura, Ingeniería y Diseño
Languages: English

The mission of Universidad Europea de Madrid is to offer its students a holistic education, helping them become leaders and professionals capable of responding effectively to the needs of today's global world, adding value within their career fields, and contributing to social advancement through their entrepreneurial spirit and ethical integrity. We also strive to create and transfer knowledge through applied research, thus making our own contribution to progress and putting ourselves at the forefront of intellectual, scientific, and technological development.

Contents

1. Basic information on the course/module

ECTS	6
Credit type	Required elective
Language	English
Delivery mode	Face to face
Trimester/Semester	First semester

2. Presentation of the course/module

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

- Aerospace production and projects 6 ECTS (fourth year)

The course of Aerospace Production and Projects covers following topics: Perform the quality plan for manufacturing and aerospace production, implementation of the quality plan. Supply chain. Advanced manufacturing processes.

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
- 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.

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).
- CT17: Addressing the issues and challenges related to their area of expertise with flexibility, initiative, innovation, and dynamism (entrepreneurial profile).

Specific competencies:

- CE29: Applied knowledge of: aerospace production systems (for those enrolled in the corresponding required elective).

  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.

Learning outcomes:

- LO33: To develope an aerospace production system plan
- LO20: To conduct studies by integrating the technologies and engineering procedures which are developed in the competencies of this modules
- LO21: From a series of requirements, and prior information, to conceptualize an engineering problem, proposes an approach to solve it, and obtain the better solution. All this related to the competencies of this module.

The table below shows the relation between the competencies developed during the course and the envisaged learning outcomes:

Competencies	Learning outcomes
CB3, CT15, CT17, CE29	LO33
CB1, CE29	LO20
CB3, CE29	LO21

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

Type of educational activity	Number of hours
Lecture-based class	20 h
Integration of team work	60 h
Self-study	50 h
Mentoring, academic monitoring and assessment	20 h
TOTAL	**150 h**

To develop the competencies and achieve the learning outcomes, you will have to complete the activities indicated in the table below:

Learning outcomes	Learning activity	Type of activity	Content
LO33: To develope an aerospace production system plan LO20. To perform studies where technologies, and engineering procedures related to competences of this module are involved.	Activity 1	Self-study	All the units
	Activity 2	Integration of team work	
LO21. From previous requirements and information, conceptualize an engineering problem, raise an approach to solve it, and find the better solution, all related to the competences of this module.	Activity 3	Lecture-based class Self-study Mentoring, academic monitoring and assessment	

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

4. Monitoring and assessment

The following table shows the assessable activities, their respective assessment criteria, and the weight each activity carries towards the final course grade.

Assessable activity	Assessment criteria	Weight (%)
Activity 1	• Appropriate hypothesis has been considered. • The results are analyzed and conclusions extracted. • Studies of state of the art are included	25-40%
Activity 2	• Appropriate hypothesis has been considered. • The results are analyzed and conclusions are outlined. • Studies of state of the art are included • Students cooperate to accomplish previous criteria.	25-45%
Activity 3	• Appropriate hypothesis has been considered. • The complete set of equations to solve the problem has been expound • Correct results are obtained according to the hypothesis considered. • The results are analyzed and conclusions are outlined.	30-35%

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

4.1. First exam period

To pass the course in the first exam period you should

- Obtain a minimum mark of 5 over 10 in every evaluation method:
- A class attendance of 50% is required.

4.2. Second exam period

To pass the course in the second exam period you should

- Obtain a minimum mark of 5 over 10 in every evaluation method.

5. Bibliography

Recommended bibliography will be updated in virtual course.

6. How to communicate with your professor

Whenever you have a question about the content or activities, don't forget to post it to your course forum so that your classmates can read it.

You might not be the only one with the same question!

If you have a question that you only want to ask your professor, you can send him/her a private message from the *Campus Virtual*. And if you need to discuss something in more detail, you can arrange an advisory session with your professor.

It's a good idea to check the course forum on a regular basis and read the messages posted by your classmates and professors, as this can be another way to learn.

7. Study recommendations

When you study at university, you need to plan and be consistent from the first week. It's very useful to exchange experiences and opinions with professors and other students, as this will help you develop core competencies such as flexibility, negotiating skills, teamwork, and, of course, critical thinking.

To help you, we recommend using a general method of study based on the following points:

- Study systematically and at a steady pace.
- Attend class and regularly check the course forum on the *Campus Virtual* so that you keep up to date with what's happening.
- Participate actively in the course by sharing your opinions, doubts and experiences relating to the topics covered and/or suggesting new topics of interest for discussion.
- Read the messages posted by your classmates and/or professors.

Active participation in physical and virtual classroom activities is of special interest and academic value. You can participate in many different ways: asking questions, giving your opinion, doing all the activities your professor suggests, taking part in collaborative activities, helping your classmates, etc. This way of working requires effort, but it will help you get better results as you develop your competencies.