



## Course guides

# 295907 - FABAD1 - Additive Manufacturing 1

Last modified: 04/06/2021

**Unit in charge:** Barcelona East School of Engineering  
**Teaching unit:** 712 - EM - Department of Mechanical Engineering.

**Degree:** BACHELOR'S DEGREE IN BIOMEDICAL ENGINEERING (Syllabus 2009). (Optional subject).  
BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2009). (Optional subject).  
BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING (Syllabus 2009). (Optional subject).  
BACHELOR'S DEGREE IN ENERGY ENGINEERING (Syllabus 2009). (Optional subject).  
BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Optional subject).  
BACHELOR'S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Optional subject).  
BACHELOR'S DEGREE IN MATERIALS ENGINEERING (Syllabus 2010). (Optional subject).

**Academic year:** 2021    **ECTS Credits:** 3.0    **Languages:** Spanish

### LECTURER

**Coordinating lecturer:** JOSE ANTONIO TRAVIESO RODRIGUEZ  
**Others:** Primer quadrimestre:  
JOSE ANTONIO TRAVIESO RODRIGUEZ - M10

### PRIOR SKILLS

Drawing 3D pieces

### REQUIREMENTS

GRAPHICAL EXPRESSION

### TEACHING METHODOLOGY

There will be theory sessions and team work sessions based on a project

### LEARNING OBJECTIVES OF THE SUBJECT

The subject pretends that the student:

1. Have the ability to select and design the manufacturing process for parts using additive manufacturing techniques.
2. Apply and integrate the connections to develop the project of the manufacture of a mechanical assembly, using CAD-CAM-CAE techniques and additive manufacturing.
3. Be able to control the quality of the manufactured parts.

### STUDY LOAD

Type	Hours	Percentage
Self study	45,0	60.00
Hours large group	30,0	40.00

**Total learning time:** 75 h



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### Generals issues about additive manufacturing techniques

**Description:**

content english

**Specific objectives:**

Acquire knowledge about the different techniques of additive manufacturing

**Full-or-part-time:** 3h

Theory classes: 2h

Practical classes: 1h

### Project development

**Description:**

content english

**Full-or-part-time:** 3h 20m

Theory classes: 3h

Guided activities: 0h 20m

## GRADING SYSTEM

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The evaluation of the project will be based on the presentation of the report and a final presentation. Partial deliveries will be distributed throughout the semester

This subject does not have re-evaluation test

## EXAMINATION RULES.

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$$NF = 0.6 NP + 0.4 * E$$

NF-Final mark

NP- Project Mark

E- Partial deliveries