



# Course guide

## 295704 - TEMA - Materials Technology

Last modified: 27/05/2024

**Unit in charge:** Barcelona East School of Engineering  
**Teaching unit:** 702 - CEM - Department of Materials Science and Engineering.  
**Degree:** BACHELOR'S DEGREE IN MATERIALS ENGINEERING (Syllabus 2010). (Compulsory subject).  
**Academic year:** 2024    **ECTS Credits:** 6.0    **Languages:** Catalan, Spanish

### LECTURER

**Coordinating lecturer:** MIGUEL MORALES COMAS

**Others:** Segon quadrimestre:  
JONATHAN CAILLOUX - M11, M12  
VIOLETA DEL VALLE GARCÍA MASABET - M11, M12  
DANIEL GAUDE FUGAROLAS - M11, M12  
MARIA LLUÏSA MASPOCH RULDUÀ - M11, M12  
MIGUEL MORALES COMAS - M11, M12  
ORLANDO ONOFRE SANTANA PEREZ - M11, M12

### TEACHING METHODOLOGY

### LEARNING OBJECTIVES OF THE SUBJECT

### STUDY LOAD

| Type              | Hours | Percentage |
|-------------------|-------|------------|
| Hours large group | 50,0  | 33.33      |
| Self study        | 90,0  | 60.00      |
| Hours small group | 10,0  | 6.67       |

**Total learning time:** 150 h

### CONTENTS

#### Introduction

**Description:**  
content english

**Full-or-part-time:** 1h  
Theory classes: 1h



#### title english

**Description:**

content english

**Full-or-part-time:** 16h 10m

Theory classes: 4h 30m

Laboratory classes: 2h

Self study : 9h 40m

#### Plastic deformation forming

**Description:**

content english

**Full-or-part-time:** 38h 50m

Theory classes: 13h 30m

Practical classes: 2h

Self study : 23h 20m

#### Powder metallurgy

**Description:**

content english

**Full-or-part-time:** 12h 30m

Theory classes: 3h

Practical classes: 2h

Self study : 7h 30m

#### Postprocessing operations

**Description:**

Heat treatments. Assembly technologies. Machining.

**Full-or-part-time:** 15h

Theory classes: 6h

Self study : 9h

## GRADING SYSTEM