## **AEROSPACE ENGINEERING (LM52)**

(Brindisi - Università degli Studi)

# Teaching COMPUTER AIDED DESIGN FOR AEROSPACE APPLICATIONS

GenCod A005152

Owner professor Marta DE GIORGI

**Teaching in italian** COMPUTER AIDED DESIGN FOR AEROSPACE

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SSD code ING-IND/15

Reference course AEROSPACE

**ENGINEERING** 

**Course type** Laurea Magistrale

Credits 6.0

**Teaching hours** Ore-Attivita-frontale:

54.0

For enrolled in 2018/2019

Taught in 2018/2019

Course year 1

Language INGLESE

**Curriculum PERCORSO COMUNE** 

**Location** Brindisi

Semester Secondo-Semestre

**Exam type** Orale

**Assessment** Voto-Finale

Course timetable

https://easyroom.unisalento.it/Orario

REQUIREMENTS

Sufficiency in geometry and linear algebra.

**COURSE AIMS** 

#### Overview

Computer aided design aims at developing engineering design skills with a particular focus on the proficient use of modern CAD-integrated analysis tools.

#### **Learning Outcomes**

After the course the student should be able to

- \* acquire detailed knowledge and understanding of the most recent advances in 3D computer aided design.
- \* know the fundamental building blocks for creating parametric geometry.

### ASSESSMENT TYPE

The exam consists of two cascaded parts (maximum overall duration: three hours).

The first part is closed book (duration: one hour); the student is asked to illustrate some theoretical topics.

The second part, that starts when the student has completed the first part (duration: two hours), consists in modelling, using CATIA, a given mechanical/aeronautical component and outputting the detail drawing.



#### **FULL SYLLABUS**

Introduction: CAD/CAM/CAE systems in the industrial product development cycle.

Geometric modeling methods and techniques.

The representation schemes of solid geometry: CSG, B-rep, finite elements, schemes by

enumeration of occupied spaces .

CATIA V5: Introduction CATIA V5: The sketching CATIA V5: Part Design CATIA V5: Assembly Design

CATIA V5: Generative Shape Design

CATIA V5: Drawing

