# uc3m Universidad Carlos III de Madrid

## Entrepreneurship & Innovation

Academic Year: ( 2024 / 2025 ) Review date: 18-04-2023

Department assigned to the subject: Mechanical Engineering Department

Coordinating teacher: NIETO SANCHEZ, MARIA JESUS

Type: Electives ECTS Credits: 3.0

Year: 2 Semester: 1

#### **OBJECTIVES**

#### Basic competences

CB6 To possess and understand knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context

CB7 Students must know how to apply the knowledge acquired and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study

CB8 Students must be able to integrate knowledge and face the complexity of making judgments based on information that, being incomplete or limited, includes reflections on social and ethical responsibilities linked to the application of their knowledge and judgments

CB9 Students must know how to communicate their conclusions and the knowledge and ultimate reasons that sustain them to specialized and non-specialized audiences in a clear and unambiguous way

CB10 Students must have the learning skills allowing them to continue studying in a way that will be largely self-directed or autonomous.

#### General competences

CG1 Capacity for the formulation, critical verification and defense of hypotheses, as well as the design of experimental tests for verification.

CG5 Ability to handle the English, technical and colloquial language.

### Specific competences

CE15 Ability to develop a professional activity in an organization, being aware of the business and enterprise context.

## **DESCRIPTION OF CONTENTS: PROGRAMME**

- Technological entrepreneurship;
- Innovation focused on the user: Design thinking and lean startup;
- Strategic decisions of innovation: Open Innovation;
- Strategies for the exploitation of innovation;
- Business models: Business model canvas;
- Business idea and viability of business ideas;
- Financing and forms of support for the creation of technological spin-offs.

## LEARNING ACTIVITIES AND METHODOLOGY

AF1 Theoretical class

AF2 Practical classes

AF6 Group work

AF7 Individual student work

AF8 Evaluation activities

## **TEACHING METHODOLOGIES**

MD1: Lecture in class by the professor aided by computer and audiovisual tools, in which the course; s main concepts will be developed, and the main literature will be provided.

MD2: Critical reading of the texts recommended by the course¿s professor: press articles, reports, manuals and/or academic articles, for their discussion in class, or to expand and consolidate the lessons of the course.

MD3: Resolution of cases, problems, etc, provided by the professor, individually or in group.

MD4: Exposition and discussion in class, moderated by the professor, on topics regarding the contents of the course, as well as practical cases.

MD5: Making of works and reports individually or in group.

#### ASSESSMENT SYSTEM

**EVALUATION SYSTEMS:** 

% end-of-term-examination: 50
% of continuous assessment (assigments, laboratory, practicals...): 50

SE2 Individual or group work carried out during the course (50%) SE3 Final exam (50%)

This assessment is applied both in the ordinary and extraordinary call

#### **BASIC BIBLIOGRAPHY**

- Hisrich, R.D., Peters, M.P., Shepherd, D.E.. Entrepreneurship., McGraw-Hill., 2013
- Rodríguez, A. Nieto, M.J., Fernández, Z., Revilla, A. Manual de Creación de Empresas. , Civitas-Thompson Reuters, 2014
- Schilling, Melissa A. Strategic management of technological innovation., McGraw-Hill., 2017 (5th edition)

## ADDITIONAL BIBLIOGRAPHY

- Westland, J.C. Global Innovation Management., Palgrave, 2016