uc3m Universidad Carlos III de Madrid

Entrepreneurship in AI

Review date: 31-05-2022 Academic Year: (2022 / 2023)

Department assigned to the subject: Mechanical Engineering Department

Coordinating teacher: NIETO SANCHEZ, MARIA JESUS

Type: Electives ECTS Credits: 3.0

Year: 1 Semester: 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

No requirements

OBJECTIVES

OBJECTIVES:

- To know the complex process associated with the development of an Al-based product or service, from its conception to the planning, start-up and new venturing
- To know the basic elements of the firm and develop ethical behavior and social responsibility
- To assimilate the concepts and develop the entrepreneurial skills to discover and lead Al-based innovations.
- To know the phases for the creation of a new company or to promote entrepreneurship in companies.

DESCRIPTION OF CONTENTS: PROGRAMME

- 1. Entrepreneurship: from the opportunity to the new venture
- 2. Business ideas: Innovation and creativity techniques
- 2.1. Technological trends in entrepreneurship: AI, IoT, 5G, etc.
- 2.2. Innovation methodology: Design Thinking
- 3. Ideation Workshop. Al solutions for real problems.
- 4. Business model, Business Model Canvas
- 5. Lean Startup Methodology. The Minimum Viable Product
- 6. Business plan: design, structure and purpose.
- 7. Finance for entrepreneurs: startup financing and accounting basic concepts
- 8. Legal aspects and Protection of innovation
- 9. Communication techniques

LEARNING ACTIVITIES AND METHODOLOGY

Theorical class

Practical theoretical classes

Tutorials

Team work

Individual student work

Exams

ASSESSMENT SYSTEM

Final exam: 60%

Continuous evaluation: 40%: includes the individual and team work, and proposed activities during the course

Class participation:10%

% end-of-term-examination: 30 % of continuous assessment (assignments, laboratory, practicals...): 70

BASIC BIBLIOGRAPHY

- Rodríguez Márquez, A., Nieto, M.J, Fernández, Z., Revilla, A. Manual de creación de empresas. De la oportunidad a la puesta en marcha., Civitas, (2014)

ADDITIONAL BIBLIOGRAPHY

- Langa. B. Creación de Modelos de Negocio de éxito basados en Inteligencia Artificial , Independently published, (2017)
- Osterwalder, A. y Pigneur, Y. Generación de Modelos de Negocio, Deusto , (2011)
- Ries E. El método de Lean Startup: Cómo crear empresas de éxito utilizando la innovación continua, Ediciones Deusto, (2011)