Lean Startup Process

Academic Year: (2021 / 2022) **Review date: 30/08/2021 11:21:57**

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: AMESCUA SECO, ANTONIO DE

Type: Electives ECTS Credits : 6.0

Year : 1 Semester : 1

OBJECTIVES

BASIC COMPETENCES
CB6 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 That students 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 That students are able to integrate knowledge and face the complexity of formulating 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
CB 9 That students know how to communicate their conclusions and the knowledge and ultimate reasons that support them to specialized and non-specialized audiences in a clear and unambiguous way
CB10 That students possess the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous.

GENERAL COMPETENCES
CG1 Ability to understand and apply research methods and techniques in the field of Computer Engineering.
CG2 Ability to conceive, design or create, put into practice and adopt a substantial process of research or creation.
CG3 Ability to apply the knowledge acquired and to solve problems in new or little-known environments within broader and multidisciplinary contexts, until being able to integrate this knowledge.
CG4 Ability to adequately and with a certain originality elaborate written compositions or motivated arguments, to write plans, work projects or scientific articles or to formulate reasonable hypotheses.
CG5 Having developed sufficient autonomy to participate in the development of a research project in the field of Computer Engineering.
CG6 That students know how to transmit in a clear and unambiguous way to a specialized audience or not, results from scientific and technological research or the most advanced field of innovation, as well as the most relevant foundations on which they are based.

SPECIFIC COMPETENCES
CE1 Ability to guide research work in the field of Computer Engineering.
CE2 Ability to critically analyze technical and scientific documents in the field of Computer Engineering.
CE3 Know the meaning of scientific research.
CE4 That the students know the generic types of publications that exist as well as their specific contents.

LEARNING OUTCOMES
- Startups
- Lean Startup Process
- Business Model Canvas
- Value Proposition Design

DESCRIPTION OF CONTENTS: PROGRAMME

1. Lean Startup Basics
2. Ideas
3. Market Research Techniques
4. Value Proposition Design
5. Prototype
6. Business Model Canvas
7. Types of Innovation
8. Pitch elevator

LEARNING ACTIVITIES AND METHODOLOGY

LEARNING ACTIVITIES
AF1 Theoretical practical classes [42 hours, 100% attendance]
AF3 Tutorials [2 hours, 25% attendance]
AF4 Group work [40 hours, 0% attendance]
AF5 Individual student work [58 hours, 0% attendance]
AF6 Assessment tests [8 hours, 100% attendance]

TEACHING METHODOLOGY

MD1 Lectures in the teacher's class with the support of computer and audiovisual media, in which the main concepts of the subject are developed and the bibliography is provided to complement the students' learning.
MD2 Critical reading of texts recommended by the subject teacher:
Press articles, reports, manuals and / or academic articles, either for later discussion in class, or to expand and consolidate knowledge of the subject.
MD3 Resolution of practical cases, problems, etc.¿ raised by the teacher individually or in groups
MD4 Presentation and discussion in class, under the moderation of the teacher, of topics related to the content of the subject, as well as practical cases
MD5 Preparation of works and reports individually or in groups
MD6 Lecture in class on a text or research article recommended by the professor
MD7 Carrying out individual or group tutorials

ASSESSMENT SYSTEM

% end-of-term-examination/test:	30
% of continuous assessment (assigments, laboratory, practicals…):	70

SE1 Class participation
SE2 Individual or group work carried out during the course
SE3 Exhibition in class of works carried out during the course
SE4 Final exam

BASIC BIBLIOGRAPHY

- Alex Osterwalder, Yves Pigneur, Greg Bernarda, Alan Smith Value Proposition Design, John Wiley & Sons, Inc., 2014

- Alexander Osterwalder and Yves Pigneur Business Model Generation. A Handbook for Visionaries, Game Changers, and Challengers, John Wiley & Sons, Inc., 2010

- Eric Ries The lean startup, Crown Business, 2011

- Larry Keeley, Helen Walters, Ryan Pikkel, Brian Quinn Ten Types of Innovation: The Discipline of Building Breakthroughs, John Wiley & Sons, Inc., 2013