



Course guide

820069 - IM - Innovation Management

Last modified: 27/05/2024

Unit in charge: Barcelona East School of Engineering
Teaching unit: 732 - OE - Department of Management.

Degree: BACHELOR'S DEGREE IN BIOMEDICAL ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN ENERGY ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN MATERIALS ENGINEERING (Syllabus 2010). (Optional subject).

Academic year: 2024 **ECTS Credits:** 6.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: Juan Martínez Sánchez

Others: Primer quadrimestre:
JUAN MARTINEZ SANCHEZ - T11, T12

PRIOR SKILLS

Students must have a medium or upper level in English, both oral and writing/reading because some materials and documentation used in this course are in English. Anyway, lectures are in Catalan and most materials used along this course are in Catalan.

REQUIREMENTS

No formal requirements, but is recommended to take into account what is said in the section "Prior skills" and have real interest in innovation management, business strategy and International Trade, as the concepts we are dealing with are always in this framework.

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Transversal:

3. ENTREPRENEURSHIP AND INNOVATION - Level 3. Using knowledge and strategic skills to set up and manage projects. Applying systemic solutions to complex problems. Devising and managing innovation in organizations.
4. THIRD LANGUAGE. Learning a third language, preferably English, to a degree of oral and written fluency that fits in with the future needs of the graduates of each course.

TEACHING METHODOLOGY

The work in the classroom will alternate the professor presentation of the main concepts with the discussion of innovation and international trade cases, or conferences offered by professionals from companies and institutions with innovation and/or international trade management responsibilities and the team work to solve exercises. The topics will be presented in a very practical way and students will work in collaborative teams.

Also, Students must do:

1. Individual exercises as application of the concepts presented in the theory
2. A collaborative project organized in teams of around 4 people.
3. Guided individual Self-study.



LEARNING OBJECTIVES OF THE SUBJECT

The main objective of this course is to introduce to the EEBE engineering students the principles of technology management and innovation and present the bases of international trade processes and strategies. In particular, completing the course, students should know what are the main processes involve in technological innovation, how to manage and use it to get competitive advantages in a company in an international framework. Finally, the students will learn the bases of the international trade operations and management.

STUDY LOAD

Type	Hours	Percentage
Hours small group	15,0	10.00
Self study	90,0	60.00
Hours large group	45,0	30.00

Total learning time: 150 h

CONTENTS

Chapter 1 - Innovation: concepts and innovation models.

Description:

Innovation concept and its importance. Main concepts of innovation and models that explain how innovation happens.

Specific objectives:

Introduction to Innovation Concepts and innovation models.

Full-or-part-time: 5h

Theory classes: 2h

Laboratory classes: 1h

Guided activities: 1h

Self study : 1h

Chapter 2 - Innovation Management and innovation assessment tools.

Description:

Introduction to innovation management, what tools are used, how the activity of innovation is measured and evaluated in a company.

Specific objectives:

To learn what managing innovation means, which processes and resources are managed, the main strategies, decisions, indicators and evaluation of the activity of innovation.

Full-or-part-time: 5h

Theory classes: 2h

Laboratory classes: 1h

Guided activities: 1h

Self study : 1h



Chapter 3 - Building the innovative organization and innovation strategy.

Description:

Study of the company as an organized structure and its influence on the process of innovation and design of the competitive strategy.

Specific objectives:

Knowing how the different parts of an organization are involved in the innovation process and how their coordination is essential. Meet the design process of competitive strategy and the management of technology, how it affects the coordination of various departments and how to take the main decisions to achieve a more competitive company.

Full-or-part-time: 4h

Theory classes: 2h

Laboratory classes: 1h

Guided activities: 1h

Chapter 4 - Innovation networks and open innovation.

Description:

Study of internal and external networks to stimulate innovation and innovation as a process of collaboration with all stakeholders and allies.

Specific objectives:

Study of concurrent engineering and collaboration in the broadest sense, internal and external, and the main external partners and its management to accelerate and improve innovation performance.

Full-or-part-time: 5h

Theory classes: 2h

Laboratory classes: 1h

Guided activities: 1h

Self study : 1h

Chapter 5 - Industrial property and technology protection

Description:

Study of the concept of Industrial Property and main options to protect technology and innovation: brands, logos, patents, utility models, industrial designs.

Full-or-part-time: 10h

Theory classes: 4h

Laboratory classes: 2h

Guided activities: 2h

Self study : 2h



Chapter 6 - Financing of innovation

Description:

Exam of the different alternatives to finance innovative projects, like business angels, capital risk, public administration programs, etc

Specific objectives:

to know the main options to finance innovation projects, venture capital, business angels, public programs at regional, national and European levels (H2020)

Full-or-part-time: 10h

Theory classes: 4h

Laboratory classes: 2h

Guided activities: 2h

Self study : 2h

Chapter 7 - Introduction to international trade and the global economy

Description:

Study of the concept of international trade, the main advantages and disadvantages and a general process of international transaction. An approach to the distribution of economic activity in the world and its evolution.

Specific objectives:

Introduction of the main concepts and vocabulary of international trade and overview of the global economy, countries economic evolution and growth and potential markets.

Full-or-part-time: 4h

Theory classes: 2h

Laboratory classes: 1h

Self study : 1h

Chapter 8 - International business plan and market research

Description:

Study of how to design a business plan international strategy of internationalization.

Specific objectives:

To be able to write a basic international business plan and made a market study of a specific region or country overseas.

Full-or-part-time: 6h

Theory classes: 2h

Laboratory classes: 1h

Guided activities: 2h

Self study : 1h



Chapter 9 - International transport, logistics and supply chain management

Description:

Overview of the different alternatives and operations linked to international move of goods, transport systems and strategies to manage the supply chain in order to get competitive advantages.

Specific objectives:

To be able to describe the main alternatives (and transportation companies) that would transport goods from a starting point to a destination in different country , and be able to evaluate and justify with logistics, cost or comercial arguments the convenience of choosing one transport option rather than other.

Full-or-part-time: 5h

Theory classes: 2h

Laboratory classes: 1h

Guided activities: 1h

Self study : 1h

Chapter 10 - Terms of international trade and international contracts

Description:

Study of international trade Incoterms used in international transactions

Specific objectives:

Knowing the different Incoterms used in international trade agreements, and being able to write a commercial offer in different delivery terms

Full-or-part-time: 5h

Theory classes: 2h

Laboratory classes: 1h

Guided activities: 1h

Self study : 1h

Chapter 11 - Import -Export procedures and documentation

Description:

Study of commercial processes, logistics and administration associated with an international transaction and the main documents required.

Specific objectives:

Know the main business processes, logistics and administrative operations associated with international trade, streams and understand how they relate and explain the key documents required to enable the international transaction, being able to link procedures and documentation.

Full-or-part-time: 5h

Theory classes: 2h

Laboratory classes: 1h

Guided activities: 1h

Self study : 1h



Chapter 12 - International payment methods and foreign exchange risk.

Description:

Study of the different forms of payment used in an international transaction and the risks involved in their receipts, either by default by disputes or changes in the currency market.

Specific objectives:

to know the main payment methods in international transactions, the existing risks when using each of these methods, and to be able to choose, applying critical reasoning, a payment method in front the rest of alternatives, in a set of specific circumstances.

Full-or-part-time: 5h

Theory classes: 2h

Laboratory classes: 1h

Guided activities: 1h

Self study : 1h

Chapter 13 - Legal aspects of international trade

Description:

Study of legal aspects applicable to international transactions. Review of the main international agreements and institutions with competencies in international trade regulation.

Specific objectives:

To know the main legal aspects applicable to international transactions. Review of the main international agreements and institutions with competencies in international trade regulation.

Full-or-part-time: 5h

Theory classes: 2h

Laboratory classes: 1h

Guided activities: 1h

Self study : 1h

Chapter 14 - International electronic commerce. E-commerce.

Description:

Study the technology, procedures and strategies to star-up or manage an e-business at international level.

Specific objectives:

To know the main technological platforms and acquire strategic and commercial criteria to promote e-commerce activities internationally.

Full-or-part-time: 5h

Theory classes: 2h

Practical classes: 1h

Guided activities: 1h

Self study : 1h



Chapter 15 - Cultural aspects and its influence in international business.

Description:

Study of cultural differences, protocols, values, social and religion affecting international relations and trade in particular.

Specific objectives:

To know some examples of cultural differences, protocol, values, social or religion in some important countries which represent important markets, at present or in the future, and have criteria to manage relations with the people of this country.

Full-or-part-time: 5h

Theory classes: 2h

Laboratory classes: 1h

Guided activities: 1h

Self study : 1h

GRADING SYSTEM

The students will be evaluated on the bases of continuous evaluation. Each student will have 10 marks corresponding to different exercises and test about the contents worked in the classroom. Each student will be qualified with the mark resulting from the average of the above indicated 10 different marks, assigning the same weight (10%) to each of them.

BIBLIOGRAPHY

Basic:

- Trott, Paul. Innovation management and new product development [on line]. Sixth edition. Harlow, United Kingdom: Pearson, 2017 [Consultation: 29/05/2020]. Available on: <https://ebookcentral.proquest.com/lib/upcatalunya-ebooks/detail.action?docID=5186181>. ISBN 9781292165400.

RESOURCES

Other resources:

Notes and slides for delivered through ATENEA.