

Course guides

840371 - ECEMENG - Economics and Business Studies for Engineers

Last modified: 27/05/2016

Unit in charge: Mataró College of Engineering
Teaching unit: 840 - EUPMT - Mataró College of Engineering.
Degree: BACHELOR'S DEGREE IN INFORMATICS ENGINEERING (Syllabus 2010). (Compulsory subject).
Academic year: 2016 **ECTS Credits:** 6.0 **Languages:** Catalan

LECTURER

Coordinating lecturer:

Others:

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

1. Adequate knowledge of the business idea and its institutional and legal framework, as well as the basic issues of business management and organization.
2. Capability to design, develop, select and evaluate applications and computer systems, assuring their reliability, security and quality in terms of ethic principles, law and current regulations.
3. Knowledge of nationwide, Europe wide and worldwide computing rules and regulations.
4. Capability to plan, conceive, deploy and manage computing projects, services and systems within any field, leading their implementation and continuous upgrading and assessing their economic and social impact.

Transversal:

5. ENTREPRENEURSHIP AND INNOVATION: Knowing about and understanding how businesses are run and the sciences that govern their activity. Having the ability to understand labor laws and how planning, industrial and marketing strategies, quality and profits relate to each other.

TEACHING METHODOLOGY

Classroom work is based on classes where the teacher explains the theory with real examples, current press news and case studies. This tools are solved with student participation. In view of the social character of this subject, in many cases there is no a single solution, so it is very interesting to promote a debate on some issues. In the classroom we will also work in groups, analyzing some articles, solving exercises and proposing solutions.

LEARNING OBJECTIVES OF THE SUBJECT

Upon successful completion of this subject the student will be able to:

- * Make use of economic vocabulary
- * Identify and describe main economic and social goals
- * Evaluate different solutions in Economic Policy
- * Identify main functional areas in a technology company
- * Assessing the business environment
- * Demonstrate knowledge about the ethical dimension in an organization
- * Describe different assets and sources of finance in a technology company



STUDY LOAD

Type	Hours	Percentage
Hours large group	52,0	34.67
Guided activities	8,0	5.33
Self study	90,0	60.00

Total learning time: 150 h

CONTENTS

(ENG) 1: Introduction to Economic Theory

Description:

Scarcity and Production Possibility Frontier
Economic Goals
Economic Agents
Economic Sectors
Economic Systems

Full-or-part-time: 16h

Theory classes: 6h

Self study : 10h

(ENG) 2: Microeconomics: The Market

Description:

Demand and Supply: Finding the balance
Reactions of buyers and sellers

Full-or-part-time: 25h

Theory classes: 8h

Guided activities: 2h

Self study : 15h

(ENG) 3: Macroeconomics: National Accounts

Description:

Macroeconomic Indicators: Advantages and disadvantages
Economic Policy: Fiscal Policy and Monetary Policy
Positive and negative effects of Economic Policy

Full-or-part-time: 34h

Theory classes: 12h

Guided activities: 2h

Self study : 20h



(ENG) 4: Business as an organization

Description:

Concepts: Business - Business owner - Entrepreneur
Types of companies
Functional areas in a technology company
Organization chart and Organizational Structure

Full-or-part-time: 20h

Theory classes: 7h
Guided activities: 1h
Self study : 12h

(ENG) 5: Business and its environment

Description:

Business environment
Strategic Direction
CSR and business ethics

Full-or-part-time: 21h

Theory classes: 7h
Guided activities: 1h
Self study : 13h

(ENG) 6: Business and its economic information

Description:

Balance sheet: Patrimony photography
Principal assets and liabilities in a technology company
Operating Account

Full-or-part-time: 34h

Theory classes: 12h
Guided activities: 2h
Self study : 20h

ACTIVITIES

(ENG) 1: PRESS CUTTING (CONTENTS 1, 2 AND 3)

Full-or-part-time: 7h

Guided activities: 1h
Self study: 6h



(ENG) 2: COMPANY FACT SHEET (CONTENTS 4, 5 AND 6)

Related competencies :

01 EIN. ENTREPRENEURSHIP AND INNOVATION: Knowing about and understanding how businesses are run and the sciences that govern their activity. Having the ability to understand labor laws and how planning, industrial and marketing strategies, quality and profits relate to each other.

Full-or-part-time: 12h

Guided activities: 2h

Self study: 10h

(ENG) 3: HOMEWORK ASSIGNMENT (CONTENTS 1-6)

Full-or-part-time: 10h

Guided activities: 2h

Self study: 8h

(ENG) 4: FIRST REVIEW (CONTENTS 1, 2 AND 3)

Full-or-part-time: 9h

Guided activities: 1h

Self study: 8h

(ENG) 5: SECOND REVIEW (CONTENTS 4, 5 AND 6)

Full-or-part-time: 9h

Guided activities: 1h

Self study: 8h

GRADING SYSTEM

The final grade for the course will be calculated using the following weights:

First review: 35%

Second review: 35%

Press cutting: 10%

Company Fact Sheet: 10%

Homework assignment: 10%

BIBLIOGRAPHY

Basic:

- Núria Sánchez Guillem. Dossier d'exercicis de l'assignatura. Publicacions EUPMt, 2014.
- I. Cepeda, M. Lacalle y otros.. Economía para ingenieros. Thomson, 2004.
- Francisco Mochón. Principios de economía. McGrawHill, 2010.
- Eduardo Bueno Campos. Curso básico de economía de la empresa. Pirámide, 2004.
- P. Maynar Mariño. La economía de la empresa. McGrawHill, 2007.
- P. Krugman, R. Wells and M. Olney. Essentials of Economics. Worth Publishers, 2007.
- O. Amat. Comprender la contabilidad y las finanzas. Gestión 2000, 2008.