

230654 - IBSM - Innovation Based Service Management

Coordinating unit: 230 - ETSETB - Barcelona School of Telecommunications Engineering

Teaching unit: 732 - OE - Department of Management

Academic year: 2017

Degree: MASTER'S DEGREE IN ELECTRONIC ENGINEERING (Syllabus 2013). (Teaching unit Compulsory)

MASTER'S DEGREE IN TELECOMMUNICATIONS ENGINEERING (Syllabus 2013). (Teaching unit

Compulsory)

MASTER'S DEGREE IN ELECTRONIC ENGINEERING (Syllabus 2009). (Teaching unit Optional) MASTER'S DEGREE IN INFORMATION AND COMMUNICATION TECHNOLOGIES (Syllabus 2009).

(Teaching unit Optional)

DEGREE IN ELECTRONIC ENGINEERING (Syllabus 1992). (Teaching unit Optional)

DEGREE IN TELECOMMUNICATIONS ENGINEERING (Syllabus 1992). (Teaching unit Optional)

ECTS credits: 5 Teaching languages: English

Teaching staff

Coordinator: CAROLINA CONSOLACIÓN

Others: OLGA PONS

PERE LOSANTOS

Degree competences to which the subject contributes

Specific:

- 2. Ability to develop, direct, coordinate, and technical and financial management of projects in the field of: telecommunication systems, networks, infrastructures and services, including the supervision and coordination of other's subprojects; common telecommunications infrastructures in buildings or residential areas, including digital home projects; telecommunication infrastructures in transport and environment; with corresponding energy supply facilities and assessment of electromagnetic emissions and electromagnetic compatibility.
- 1. Ability to integrate Telecommunication Engineering technologies and systems, as a generalist, and in broader and multidisciplinary contexts, such as bioengineering, photovoltaic conversion, nanotechnology and telemedicine.

Transversal:

- 3. ENTREPRENEURSHIP AND INNOVATION: Being aware of and understanding how companies are organised and the principles that govern their activity, and being able to understand employment regulations and the relationships between planning, industrial and commercial strategies, quality and profit.
- 4. SUSTAINABILITY AND SOCIAL COMMITMENT: Being aware of and understanding the complexity of the economic and social phenomena typical of a welfare society, and being able to relate social welfare to globalisation and sustainability and to use technique, technology, economics and sustainability in a balanced and compatible manner.
- 5. TEAMWORK: Being able to work in an interdisciplinary team, whether as a member or as a leader, with the aim of contributing to projects pragmatically and responsibly and making commitments in view of the resources that are available.
- 6. EFFECTIVE USE OF INFORMATION RESOURCES: Managing the acquisition, structuring, analysis and display of data and information in the chosen area of specialisation and critically assessing the results obtained.
- 7. FOREIGN LANGUAGE: Achieving a level of spoken and written proficiency in a foreign language, preferably English, that meets the needs of the profession and the labour market.



68.80%

230654 - IBSM - Innovation Based Service Management

Teaching methodology

- Lectures
- Application classes
- Group work (distance)
- Exercises
- Oral presentations
- Other activities
- Short answer test (Control)
- Short answer test (Test)

Learning objectives of the subject

Learning objectives of the subject:

The aim of this course is to help students to understand how an organization operates under the rules of a service economy. First, we consider the basics of this kind of economy regarding strategy and innovation. Later on we will discover the differences between quality processes for physical and virtual products, and finally we will analyze the role of people, teams and creativity when knowledge and professional links become the main assets of the companies.

Learning results of the subject:

- Ability to search for information, identify the strategy, and explain the business model of an ICT related company from the information collected.
- Ability to work on a collaborative way to define an sketch of a an ICT organization suitable for the service economy paradigm.
- Ability to understand and apply the most common quality analysis tools and techniques.

Self study:

- Ability to design a service using the Methodology of Quality Function Deployment.
- Ability to understand leadership process in the organizations

Study load					
	Total learning time: 125h	Hours large group:	39h	31.20%	
		Hours medium group:	Oh	0.00%	
		Hours small group:	0h	0.00%	
		Guided activities:	0h	0.00%	

86h



230654 - IBSM - Innovation Based Service Management

Content

1. Service Economy

Learning time: 18h

Self study (distance learning): 12h
Theory classes: 6h

1.1. Introduction

Degree competences to which the content contributes:

Description:

- o Theory. What is a service economy? Is it really a new paradigm?
- o Reading and debate. Do services create or destruct jobs?
- o Team arrangement and topic assignment

1.2. Strategy and innovation management

Degree competences to which the content contributes:

Description:

- o Theory. When long term planning is not anymore a strategic option.
- o Case Study. Hyds UPC Spin off.
- o Team work on one topic. Hypothesis.

2. Service Economy, Technologies and Society

Learning time: 18h

Theory classes: 6h Self study : 12h

Description:

- o Theory. When technologies impact society. Big data.
- o Reading and discussion: IBM Smart Planet strategy
- o Team work on one topic. Gathering information.

2.1. Innovative Businesses

Degree competences to which the content contributes:

Description:

- o Theory: Innovative business models for a new economy.
- o Reading and discussion: reCAPTCHA: Human-Based Character Recognition¿
- o Team work on one topic. Work on information and knowledge.



230654 - IBSM - Innovation Based Service Management

3. Opening the business models

Learning time: 20h

Theory classes: 6h Self study: 14h

Description:

- o Theory: Collaborative consumption and Open Source.
- o Reading and discussion. Fablab and Arduino. From bit to atoms.
- o Team work on one topic. Conclusions on the research.
- o Exercises presentation
- o Assessment through exam or quiz.

4. Service Marketing and Service Quality. Measuring the quality of Services

Learning time: 18h

Theory classes: 6h Self study: 12h

Description:

- o What is Service Marketing?
- o Service Quality.
- o The SERVQUAL model.
- o Creating a service quality culture

5. The Design of Services

Learning time: 18h

Practical classes: 12h Theory classes: 6h

Description:

- o Design of Services: The QFD Methodology.
- o The House of Quality. Case Study



230654 - IBSM - Innovation Based Service Management

6. Organizational Behaviour and Leadership

Learning time: 21h

Theory classes: 9h Self study: 12h

Description:

The Importance of Organizational Behaviour to Managers

- o 3D model: Organization, Individual behaviour (person) and Group behaviour (work team, leadership) Group behaviour: Work team.
- o Group Roles.
- o Characteristics of effective teams

7. The importance of Leadership in the organizations

Learning time: 15h
Theory classes: 3h
Self study: 12h

Description:

Group behaviour: Evaluating Leadership

o Managerial Roles

o Situational Leadership. Theories.



230654 - IBSM - Innovation Based Service Management

Planning of activities

EXERCISES

Description:

Exercises to strengthen the theoretical knowledge.

ORAL PRESENTATION

Description:

Presentation of a work group.

SHORT ANSWER TEST (CONTROL)

Description:

Mid term control.

SHORT ANSWER TEST (TEST)

Description:

Partial evaluation test with theoretical questions and short exercises.

Qualification system

Partial examinations and controls 30%

Exercises: 10%

Individual assessments: 10% Group assessments: 30%

Attendance 20%

Bibliography

Basic:

Morris, L.. Permanent innovation. Walnut Creek (CA): Innovation Academy, 2011. ISBN 9780615522845.

Palmer, Adrian. Principles of services marketing. 6th ed. Maidenhead: Mc Graw Hill, 2011. ISBN 9780077129514.

Gordon, J.R. Organizational behavior: a diagnostic approach. 7th ed. Upper Saddle River, NJ: Prentice Hall, 2002. ISBN 9780130328472.

Complementary:

Ficalora, J.P.; Cohen, L. Quality function deployment and six SIGMA. 2nd ed. Prentice Hall, 2012. ISBN 9780133364439.

Harvard Business Review. HBR's 10 must reads on leadership. Harvard Business Review Press, 2011. ISBN 978-1422157978.