Course guide
250964 - ESPEMPENG - Entrepreneurship

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

Degree: MASTER'S DEGREE IN NUMERICAL METHODS IN ENGINEERING (Syllabus 2012). (Compulsory subject).
ERASMUS MUNDUS MASTER'S DEGREE IN COMPUTATIONAL MECHANICS (Syllabus 2013). (Optional subject).

Academic year: 2022 ECTS Credits: 5.0 Languages: English

LECTURER
Coordinating lecturer: FRANCESC XAVIER BELLES ROS
Others: FRANCESC XAVIER BELLES ROS

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES
Specific:
8382. Experience in numerical simulations. Acquisition of fluency in modern numerical simulation tools and their application to multidisciplinary problems engineering and applied sciences.
8383. Interpretation of numerical models. Understanding the applicability and limitations of the various computational techniques.
8384. Experience in programming calculation methods. Ability to acquire training in the development and use of existing computational programs as well as pre and post-processors, knowledge of programming languages ??and of standard calculation libraries.

TEACHING METHODOLOGY
The course consists of 1.5 hours per week of classroom activity (large size group).

The 1.5 hours in the large size groups are devoted to theoretical lectures, in which the teacher presents the basic concepts and topics of the subject, shows examples and solves exercises.

The rest of weekly hours devoted to laboratory practice.

Support material in the form of a detailed teaching plan is provided using the virtual campus ATENEA: content, program of learning and assessment activities conducted and literature.

Although most of the sessions will be given in the language indicated, sessions supported by other occasional guest experts may be held in other languages.
LEARNING OBJECTIVES OF THE SUBJECT

What is an entrepreneur and what is his or her importance within the company?

* Identify the mechanisms of organisation and growth in a company and learn to manage its growth.* Identify the mechanisms of failure in a company or project and establish measures to avoid it.

* Aspects of business initiative.
* The structure and presentation of opportunities
* The resources and structures of finances
* People and teams
* How to manage companies in an international level
* Short and long term management of growth
* Generation and purchase
* To keep the flow of ideas within a company, case studies
* Identification of opportunities and business plans
* Financial sources and their structuring

Learning Resources:

STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Hours small group</td>
<td>20.0</td>
<td>16.00</td>
</tr>
<tr>
<td>Hours large group</td>
<td>20.0</td>
<td>16.00</td>
</tr>
<tr>
<td>Guided activities</td>
<td>5.0</td>
<td>4.00</td>
</tr>
<tr>
<td>Self study</td>
<td>80.0</td>
<td>64.00</td>
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</tbody>
</table>

Total learning time: 125 h

CONTENTS

Areas and functions in business

Description:
Introduction. Areas and functions in business

Full-or-part-time: 6h
Theory classes: 2h 30m
Self study: 3h 30m

The entrepreneur's personality

Description:
The entrepreneur’s personality

Full-or-part-time: 3h 35m
Theory classes: 1h 30m
Self study: 2h 05m
The business idea. How to spot it.

**Description:**
The business idea. How to spot it.

**Full-or-part-time:** 3h 35m
Theory classes: 1h 30m
Self study: 2h 05m

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Elements of business policy

**Description:**
Elements of business policy

**Full-or-part-time:** 3h 35m
Theory classes: 1h 30m
Self study: 2h 05m

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Business model. Contents of a business plan.

**Description:**
Business model. Contents of a business plan.
Team work for the creation of a business plan draft

**Full-or-part-time:** 51h 36m
Theory classes: 1h 30m
Laboratory classes: 20h
Self study: 30h 06m

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Costs and prices

**Description:**
Costs and prices

**Full-or-part-time:** 3h 35m
Theory classes: 1h 30m
Self study: 2h 05m

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Elements of Marketing

**Description:**
Elements of Marketing

**Full-or-part-time:** 3h 35m
Theory classes: 1h 30m
Self study: 2h 05m
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Full-or-part-time</th>
<th>Theory classes</th>
<th>Self study</th>
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<tbody>
<tr>
<td>Financial accounting</td>
<td>Fiancial accounting</td>
<td>3h 35m</td>
<td>1h 30m</td>
<td>2h 05m</td>
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<tr>
<td>Corporate finance</td>
<td>Corporate finance</td>
<td>3h 35m</td>
<td>1h 30m</td>
<td>2h 05m</td>
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<td>Financial resources</td>
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<td>6h</td>
<td>2h 30m</td>
<td>3h 30m</td>
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<td>Operations</td>
<td>Operations</td>
<td>3h 35m</td>
<td>1h 30m</td>
<td>2h 05m</td>
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<tr>
<td>Human Resources</td>
<td>Human Resources</td>
<td>3h 35m</td>
<td>1h 30m</td>
<td>2h 05m</td>
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</table>
GRADING SYSTEM

The mark of the course is obtained from the ratings of continuous assessment and their corresponding laboratories and/or classroom computers.

Continuous assessment consist in several activities, both individually and in group, of additive and training characteristics, carried out during the year (both in and out of the classroom).

The teachings of the laboratory grade is the average in such activities.

The evaluation tests consist of a part with questions about concepts associated with the learning objectives of the course with regard to knowledge or understanding, and a part with a set of application exercises.

EXAMINATION RULES.

Failure to perform a laboratory or continuous assessment activity in the scheduled period will result in a mark of zero in that activity.

BIBLIOGRAPHY

Basic:

Complementary: