220556 - Financial Management

Coordinating unit: 205 - ESEIAAT - Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 732 - OE - Department of Management
Academic year: 2019
Degree: MASTER'S DEGREE IN MANAGEMENT ENGINEERING (Syllabus 2012). (Teaching unit Compulsory)
ECTS credits: 5
Teaching languages: Catalan, Spanish

Teaching staff

Coordinator: MERCEDES GARCIA PARRA
Others: CARLOS SICILIA ESPÍN

Degree competences to which the subject contributes

Specific:
1. Apply concepts and techniques of descriptive and statistical inference under uncertainty.
2. Apply theories and inherent principles in the general direction of an organization with the aim of analyzing uncertainty complex situations and make decisions using engineering tools.
3. Apply theories and inherent principles in the financial area in order to analyze uncertainty complex situations and make decisions using engineering tools.
4. Develop a business plan in a new context.

General:
5. Ability to apply knowledge to solve problems in new environments or unfamiliar environments within broader contexts (or multidisciplinary) related to engineering.
6. Self-learning capacity to independent continuous training.
7. Ability to effectively communicate their findings, knowledge and concluding reasons to skilled and unskilled audiences, clearly and unambiguously.
8. Ability to integrate knowledge and formulate judgments with the aim of making decisions based on information that, with incomplete or limited include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgments.
9. Ability to understand the impact of engineering solutions in a global and social context.
10. Ability to operate and lead multidisciplinary and multicultural groups, with negotiation skills, group work, relationships in an international setting, and conflict resolution.
220556 - Financial Management

**Teaching methodology**

The course is divided into three parts:

Theory classes
Practical classes
Self-study for doing exercises and activities

In the theory classes, teachers will introduce the theoretical basis of the concepts, methods and results and illustrate them with examples appropriate to facilitate their understanding.

In the practical classes (in the classroom), teachers guide students in applying theoretical concepts to solve problems, always using critical reasoning. We propose that students solve exercises in and outside the classroom, to promote contact and use the basic tools needed to solve problems.

Students, independently, need to work on the materials provided by teachers and the outcomes of the sessions of exercises/problems, in order to fix and assimilate the concepts. The teachers provide the curriculum and monitoring of activities (by ATENEA).

**Learning objectives of the subject**

The financial management course introduces the students to the most significant aspects of the company's financial area, through the knowledge of basic concepts and the budgetary and financial accounting techniques. The objective is to analyze the accounting information to make decisions and to undertake new investment and financial projects.

**Study load**

<table>
<thead>
<tr>
<th>Total learning time: 125h</th>
<th>Hours large group: 8h</th>
<th>6.40%</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Hours medium group:</td>
<td>15h</td>
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<tr>
<td></td>
<td>Guided activities:</td>
<td>22h</td>
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<tr>
<td></td>
<td>Self study:</td>
<td>80h</td>
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## Content

<table>
<thead>
<tr>
<th>Module 1: Budget Accounting</th>
<th>Learning time: 40h 30m</th>
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<tbody>
<tr>
<td></td>
<td>Theory classes: 2h</td>
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<tr>
<td></td>
<td>Practical classes: 4h</td>
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<tr>
<td></td>
<td>Guided activities: 5h 30m</td>
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<tr>
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<td>Self study : 29h</td>
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</tbody>
</table>

**Description:**
- Key concepts of financial management.
- The measurement of wealth: Balance sheet
- The measurement of income: the Income Statement
- Treasury Management
- Economic and monetary flows: the difference between costs and payments.
- Amortization.
- Stock Rating
- The current assets formation
- The investment influences and its financing
- Outcome from the sale of fixed assets or non-current assets.

<table>
<thead>
<tr>
<th>Module 2: Financial Accounting</th>
<th>Learning time: 28h 30m</th>
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<tbody>
<tr>
<td></td>
<td>Theory classes: 2h</td>
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<tr>
<td></td>
<td>Practical classes: 4h</td>
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<tr>
<td></td>
<td>Guided activities: 5h 30m</td>
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<td>Self study : 17h</td>
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**Description:**
- Concept and role of financial accounting.
- Accounting technique.
- Accounts.
- Movement of accounts.
- The financial statements.
- The accounting cycle.
- Accounting entries in the enterprise.
- The General Accounting Plan for SMEs
### Module 3: Financial Statement Analysis

<table>
<thead>
<tr>
<th>Learning time: 29h 30m</th>
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<tbody>
<tr>
<td>Theory classes: 2h</td>
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<tr>
<td>Practical classes: 4h</td>
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<tr>
<td>Guided activities: 5h 30m</td>
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<tr>
<td>Self study: 18h</td>
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</tbody>
</table>

**Description:**
- Introduction to Financial Statement Analysis.
- Structure of Balance Sheet and Income Statement
- Cash Flow Statement
- Working capital and cash cycle
- Analysis of liquidity and debt
- Asset Management
- Ratios of the income statement.
- Breakeven point
- Analysis of profitability, output and financial leverage.

### Module 4: Analysis of investment and financing projects

<table>
<thead>
<tr>
<th>Learning time: 26h 30m</th>
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<tbody>
<tr>
<td>Theory classes: 2h</td>
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<tr>
<td>Practical classes: 3h</td>
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<tr>
<td>Guided activities: 5h 30m</td>
</tr>
<tr>
<td>Self study: 16h</td>
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</tbody>
</table>

**Description:**
- Concept of investment.
- Objective of the Investment analysis.
- Type of investment
- Elements of the investment
- Cash-flow economic and Cash-flow financial
- Selection standards of investment projects.
- Investment Project versus financing project.

### Qualification system

- 1º Mid-Semester Exam, weight: 40%
- 2º Mid-Semester Exam, weight: 40%
- Case Studies, weight 20%

The unsatisfactory results of the two mid-semester exam can redirect using a written test to be held the same day fixed for the final exam. This test, with score between 0 and 10, can be accessed by all students enrolled. The grade obtained by the application of the renewal will replace the initial grade, as long as it is higher.
Bibliography

Basic:


Complementary:


Others resources:

- Problem portfolio for the course.
- Transparencies of every module