Course guide
320086 - GPI - Innovation Project Management

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 702 - CEM - Department of Materials Science and Engineering.

Degree: BACHELOR’S DEGREE IN TEXTILE TECHNOLOGY AND DESIGN ENGINEERING (Syllabus 2009). (Compulsory subject).

Academic year: 2022  ECTS Credits: 6.0  Languages: Catalan, Spanish

LECTURER

Coordinating lecturer: Ventura Casellas, Heura
Others: Camps Roca, Vicenç

PRIOR SKILLS

- Knowledge of business organization
- Knowledge of materials and textiles
- Knowledge of textile finishing processes

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
CE21. TEX: Ability to develop textile products and industrial manufacturing.

TEACHING METHODOLOGY

Combines theoretical sessions given by the teacher and sessions for discussion of case studies, with individual and group work performed by the student:
- Theoretical sessions
- Guided discussion sessions of individual or group works
- Individual work

LEARNING OBJECTIVES OF THE SUBJECT

- To train students to participate in the planning of business strategies based on product innovation and textile processes. Improve the competitiveness of the textile industry in today’s environment of global economy and delocalized production.
- Provide the student with the skills and knowledge necessary to create the framework that allows innovation in the company and to develop and apply the innovative ideas that are generated.
- To train professionals to: analyze, disseminate and implement innovations in textile organizations; know the key aspects for implementation of innovation management systems; optimize processes and estimate economical resources need for supporting innovation activities.
STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Hours small group</td>
<td>30,0</td>
<td>20.00</td>
</tr>
<tr>
<td>Hours large group</td>
<td>30,0</td>
<td>20.00</td>
</tr>
<tr>
<td>Self study</td>
<td>90,0</td>
<td>60.00</td>
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</tbody>
</table>

Total learning time: 150 h

CONTENTS

**TOPIC 1. The innovation culture**

Description:
1.1 What is innovation?
1.2 Why we should be innovate?
1.3 Barriers to innovation

Full-or-part-time: 28h
Theory classes: 4h
Laboratory classes: 4h
Self study: 20h

**TOPIC 2: Kinds of innovation**

Description:
2.1 Planning vs emerging
2.2 Incremental vs radical
2.3 According to nature

Full-or-part-time: 14h
Theory classes: 2h
Laboratory classes: 2h
Self study: 10h

**TOPIC 3: Management tools and their application in textile industry**

Description:
3.1 Process map
3.2 DAFO
3.3 CANVAS
3.4 Kaizen
3.5 Brain storming
3.6 Ishikawa diagram
3.7 Six thinking hats
3.8 Six Sigma

Full-or-part-time: 108h
Theory classes: 24h
Laboratory classes: 24h
Self study: 60h
GRADING SYSTEM

- Exam: 20%
- Deliverables of the case studies: 30%
- Final report: 50%.

For those students who meet the requirements and submit to the reevaluation examination, the grade of the reevaluation exam will replace the grades of all the on-site written evaluation acts (tests, midterm and final exams) and the grades obtained during the course for lab practices, works, projects and presentations will be kept.

If the final grade after reevaluation is lower than 5.0, it will replace the initial one only if it is higher. If the final grade after reevaluation is greater or equal to 5.0, the final grade of the subject will be 5.0.

BIBLIOGRAPHY

Basic:

Complementary: