Course guides
250720 - 250720 - Management Skills

Unit in charge: Barcelona School of Civil Engineering
Teaching unit: 751 - DECA - Department of Civil and Environmental Engineering.
Degree: MASTER'S DEGREE IN STRUCTURAL AND CONSTRUCTION ENGINEERING (Syllabus 2015). (Optional subject).

Academic year: 2020  ECTS Credits: 5.0  Languages: Spanish, English

LECTURER
Coordinating lecturer: PABLO PUJADAS ÁLVAREZ
Others: ANTONIO AGUADO DE CEA, PABLO PUJADAS ÁLVAREZ

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
13365. Designing and building using traditional materials (reinforced concrete, prestressed concrete, structural steel, masonry, wood) and new materials (composites, stainless steel, aluminum, shape memory alloys?).
13367. To apply innovative and sustainable technological aspects in the management and implementation of projects and works.
13370. To analyze the multiple technical and legal conditions arising in the construction of public works, and use proven methods and proven technologies with the aim of achieving greater efficiency in construction while respecting the environment and protecting the safety and health of workers and users of public works.

General:
13361. To develop, improve and use conventional materials and new construction techniques to ensure the safety requirements, functionality, durability and sustainability.
13362. To define construction processes and methods of organization and management of projects and works.
13363. To design plans for safety, quality and environmental and socioeconomic impacts related to the construction process.

TEACHING METHODOLOGY

The course consists of 2,3 hours per week of classroom activity (large size group) and 0,3 hours weekly with half the students (medium size group).

The 2,3 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 0,3 hours in the medium size groups is devoted to solving practical problems with greater interaction with the students. The objective of these practical exercises is to consolidate the general and specific learning objectives.

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.
LEARNING OBJECTIVES OF THE SUBJECT

Subject to provide criteria, knowledge and reflection on the values and qualities of a good manager

- Knowledge of criteria, knowledge and reflections on the qualities and values of a good manager. - Ability to discover, internalize and assess the impact of personal behavior as part of a team.

The importance of value formation. The engineer in the current context. The manager: leadership, creativity, innovation, motivation and communication. Evolution of society. Current business perspective: responsibility, ethics and commitment

The subject Management Skills is an intense path of personal and professional transformation with the aim of preparing future challenges that students will encounter in any company of the construction industry and anywhere in the world.

To this end, the subject trains and distinguishes the student in his leadership, organizational and management skills, working on his knowledge of the manager’s values and ethics, and reinforcing his communication, leadership, negotiation, decision-making and communication skills and abilities. Crisis management, motivation, people/team management, ...

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>9,8</td>
<td>7.83</td>
</tr>
<tr>
<td>Hours large group</td>
<td>19,5</td>
<td>15.59</td>
</tr>
<tr>
<td>Self study</td>
<td>80,0</td>
<td>63.95</td>
</tr>
<tr>
<td>Guided activities</td>
<td>6,0</td>
<td>4.80</td>
</tr>
<tr>
<td>Hours medium group</td>
<td>9,8</td>
<td>7.83</td>
</tr>
</tbody>
</table>

Total learning time: 125.1 h

CONTENTS

Endesa - VMO and this course

Description:
The subject skills for management is an intense path of personal and professional transformation with the aim of preparing the future challenges that students will find in any company and anywhere in the world.

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

The engineer in the current context

Description:
Communication Skills
Communication Skills II: Ethos Logos Pathos

Full-or-part-time: 7h 11m
Theory classes: 1h
Practical classes: 2h
Self study: 4h 11m
### Decision making

**Description:**
Reinforce knowledge regarding decision-making and introduction to decision-making methodology

**Decision Making Press I**

**Full-or-part-time:** 19h 12m  
Theory classes: 5h  
Practical classes: 3h  
Self study: 11h 12m

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### The director

**Description:**
Crisis Management  
Negotiation strategies  
Teamwork and Motivation  
Failure Management  
Entrepreneurship and Innovation  
The manager: Practice

**Full-or-part-time:** 39h 36m  
Theory classes: 11h  
Practical classes: 5h 30m  
Self study: 23h 06m

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### Changes in society

**Description:**
Neither the engineers nor the managers are alien to the world around them. Declaration of Human Rights in the current context. Analyze social changes produced in recent decades and how they have affected the company, its composition, its expectations and its problems, as the context in shape when developing their work.

**Full-or-part-time:** 4h 48m  
Theory classes: 2h  
Self study: 2h 48m

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### Changes in society

**Description:**
Evolution of society: Sustainability

**Full-or-part-time:** 4h 48m  
Theory classes: 2h  
Self study: 2h 48m
Current perspective on business

Description:
In a changing world with the current thinking that companies cannot remain the same as twenty years ago. Not only are equal to five. To see where today's organizations and what are the values that make it stand out over others. Analyze concepts such as responsibility, ethics, commitment. How companies have acquired a new role in the world today and how are trendsetter.

Full-or-part-time: 14h 23m
Theory classes: 3h
Practical classes: 3h
Self study: 8h 23m

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:
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