250729 - Safety and Health in Construction

Coordinating unit: 250 - ETSECCPB - Barcelona School of Civil Engineering
Teaching unit: 751 - DECA - Department of Civil and Environmental Engineering
Academic year: 2019
Degree: MASTER'S DEGREE IN STRUCTURAL AND CONSTRUCTION ENGINEERING (Syllabus 2015).
(Teaching unit Optional)
ECTS credits: 5

Teaching staff
Coordinator: GONZALO RAMOS SCHNEIDER
Others: GONZALO RAMOS SCHNEIDER, MANUEL VALDES LOPEZ, IGNACIO VALERO LOPEZ

Opening hours
Timetable: In accord with teachers

Degree competences to which the subject contributes

Specific:
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.

Generical:
13360. To conceive, design, analyze and manage structures or structural elements of civil engineering or building, encouraging innovation and the advance of knowledge.
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
Master classes with the development of course work and the completion of one or two visits to combine works. Therefore there is much work in the classroom and personal work outside the classroom. The material is available in Athena

Learning objectives of the subject
Subject to prepare students to be able to manage a construction site considering risk prevention and working conditions
- Capability to take into account the aspects related to occupational risk prevention and working conditions in the workplace
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Industrial works and civil works. Risks and preventive measures. Studies of health and safety. Health and Safety Plans

### Study load

<table>
<thead>
<tr>
<th></th>
<th>Theory classes:</th>
<th>Practical classes:</th>
<th>Laboratory classes:</th>
<th>Guided activities:</th>
<th>Self study:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total learning time:</strong></td>
<td>125h</td>
<td>19h 30m</td>
<td>9h 45m</td>
<td>9h 45m</td>
<td>80h</td>
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<td></td>
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<td>15.60%</td>
<td>7.80%</td>
<td>7.80%</td>
<td>64.00%</td>
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</tbody>
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### Content

#### Master Classes

- Introduction to safety and health in construction
- Regulations and Legislation
- Health and Safety Study
- Study Safety and Health 2
- Safety Plan and Health 1
- Plan Safety and Health 2
- Individual protections
- Collective Protections
- Disciplines of Occupational Risks
- Urban Resilience
- Course work
- Site visit

#### Learning time: 93h 36m

- Theory classes: 20h
- Laboratory classes: 19h
- Self study: 54h 36m

### Qualification system

The course grade is obtained from the performance of course work (50 %) and examination (50 %)

### Regulations for carrying out activities

If the test is not performed or work cannot be overcome the subject
Bibliography

Basic:

Varios. Gestión de la Prevención de Riesgos Laborales. Mutua Universal,
Varios. Recomendaciones relativas a Seguridad y Salud para la ejecución de estructuras. ACHE,
Varios. Seguridad y Salud en la Construcción. ETOSA,