Degree competences to which the subject contributes

**Basic:**
- CB1. Translation from Spanish slope
- CB2. Translation from Spanish slope
- CB3. Translation from Spanish slope
- CB4. Translation from Spanish slope
- CB5. Translation from Spanish slope

**Specific:**
- ET1. Translation from Spanish slope
- ET13. Translation from Spanish slope
- ET14. Translation from Spanish slope
- ET10. Translation from Spanish slope
- ET2. Translation from Spanish slope
- ET3. Translation from Spanish slope
- ET4. Translation from Spanish slope
- ET6. Translation from Spanish slope
Learning objectives of the subject

To achieve the necessary principles to understand the mechanical behaviour of the soil.

To comprehend the forces which arrive to the soil derived from a building, making compatible structure and foundations.

To comprehend the geotechnical studies of the ground in order to be able to decide the typology of foundation and to calculate it.

Study load

<table>
<thead>
<tr>
<th>Study load</th>
<th>Hours large group</th>
<th>Hours medium group</th>
<th>Hours small group</th>
<th>Guided activities</th>
<th>Self study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total learning time:</strong> 125h</td>
<td>21h</td>
<td>22h</td>
<td>0h</td>
<td>12h</td>
<td>70h</td>
</tr>
<tr>
<td></td>
<td>16.80%</td>
<td>17.60%</td>
<td>0.00%</td>
<td>9.60%</td>
<td>56.00%</td>
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</tbody>
</table>
# Structures IV

**Content**

<table>
<thead>
<tr>
<th>Structures IV</th>
<th>Learning time: 4h</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Theory classes: 2h</td>
</tr>
<tr>
<td></td>
<td>Practical classes: 2h</td>
</tr>
</tbody>
</table>

**Description:**
- Introduction to the soil mechanics.
- Classification and physical properties of the soil.
- Introduction to the elasticity and plasticity theory.
- Mechanical tests in laboratory.
- Rankine and Coulomb Equilibrium.
- Retaining walls.
- Slope Stability.
- In situ mechanical tests.
- Superficial foundations, strength.
- Deep foundations.

**Qualification system**

Go to catalan or spanish version.

**Bibliography**

**Basic:**
