210138 - RA IV - Architectural Representation IV

Coordinating unit: 210 - ETSAB - Barcelona School of Architecture
Teaching unit: 752 - RA - Departamento de Representación Arquitectónica
Academic year: 2019
Degree: DEGREE IN ARCHITECTURE STUDIES (Syllabus 2014). (Teaching unit Compulsory)
ECTS credits: 5  Teaching languages: Catalan, Spanish

Teaching staff

Coordinator: ANDRES DE MESA GISBERT

Others: Primer quadrimestre:
   ANDRES DE MESA GISBERT - 12
   LUIS GIMÉNEZ MATEU - 12
   ADRIÀ MARCO BERCERO - 12, 22
   JOAQUIM NARCÍS MOYA SALA - 22

   Segon quadrimestre:
   ANDRES DE MESA GISBERT - 31

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:
   ET11. Translation from Spanish slope
   ET12. Translation from Spanish slope
   ET13. Translation from Spanish slope
   ET14. Translation from Spanish slope
   ET19. Translation from Spanish slope
   ET2. Translation from Spanish slope
   ET3. Translation from Spanish slope
   ET6. Translation from Spanish slope
Generical:
CG4. Translation from Spanish slope
CG5. Translation from Spanish slope
CG7. Translation from Spanish slope
CG2. Translation from Spanish slope

Transversal:
CT1. Translation from Spanish slope
CT3. Translation from Spanish slope
CT4. Translation from Spanish slope
CT5. Translation from Spanish slope
CT6. Translation from Spanish slope
CT7. Translation from Spanish slope
CT2. Translation from Spanish slope
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#### Teaching methodology

<table>
<thead>
<tr>
<th>Classroom activities</th>
<th>Type of group</th>
<th>Week hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>T Lectures</td>
<td>Great (50/80)</td>
<td>1</td>
</tr>
<tr>
<td>P Practice</td>
<td>Small (10/30)</td>
<td>3</td>
</tr>
<tr>
<td>AD Tutorials</td>
<td>small group Tutorial (&gt;10)</td>
<td>12.5 h/ semester</td>
</tr>
</tbody>
</table>

| Personal work        |                      | 70h/semester |

#### Learning objectives of the subject

- Assimilate the necessary knowledge for the different stages involved in the construction processes of buildings, from the initial idea to the final required documentation for the building construction.

- Achieve the level of solvency required to make a presentation of the obtained results in the graphic and alphanumeric processing of architectural projects.

- Know the environmental parameters that influence the energy efficiency of buildings through the use of tools that enable the analysis of the features required for sustainable construction.

- Learn to use computer graphics resources necessary for the development of technical documentation of architectural construction processes.

- Have capacity to approach a teamwork and collaborate in its resolutions and discussions.

#### Study load

<table>
<thead>
<tr>
<th>Total learning time: 125h</th>
<th>Hours large group: 11h</th>
<th>8.80%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours medium group: 0h</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>Hours small group: 32h</td>
<td>25.60%</td>
</tr>
<tr>
<td></td>
<td>Guided activities: 12h</td>
<td>9.60%</td>
</tr>
<tr>
<td></td>
<td>Self study: 70h</td>
<td>56.00%</td>
</tr>
</tbody>
</table>
THE USE OF PARAMETRIC SYSTEMS AS RESOURCES OF THE BUILDING PROCESS

**Degree competences to which the content contributes:**

**Description:**
Knowledge of the tools necessary to implement work with objects in the development of architectural designs.

Control of architectural elements in global information systems of buildings.

Generation of architectural components for its integration into metric and construction control systems.

Solution to the implementation of buildings into natural environments. Graphic control of the land topography.

Introduction to free-form geometry parametric systems applied to architectural design. Application of parametric control tools to the resolution of architectural forms.

Interaction of different parametric tools to give versatility and to enable the modification of results in construction processes.

Basic knowledge in the management and research of construction processes.

Knowledge about the possibilities of exchange of alphanumeric and graphical information applied to calculation of technical processes and representation of geometric forms involved in architectural projects.

**Qualification system**

<table>
<thead>
<tr>
<th>Systems Assessment</th>
<th>Continuous Assessment</th>
<th>Final Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long reply exercises</td>
<td>70%</td>
<td>80%</td>
</tr>
<tr>
<td>Short reply Tests</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Work and individual exercises</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

**Regulations for carrying out activities**

In order to carry out the assessment tests, it will be necessary to use a laptop computer with wi-fi connection capable of running graphic information systems.

**Bibliography**