205056 - Advanced Design of the Movement Area

Coordinating unit: 205 - ESEIAAT - Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 220 - ETSEIAT - Terrassa School of Industrial and Aeronautical Engineering
Academic year: 2017
Degree: MASTER'S DEGREE IN SPACE AND AERONAUTICAL ENGINEERING (Syllabus 2016). (Teaching unit Optional)
MASTER'S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2013). (Teaching unit Optional)
MASTER'S DEGREE IN AERONAUTICAL ENGINEERING (Syllabus 2014). (Teaching unit Optional)
ECTS credits: 3
Teaching languages: English

Coordinator: Jordi Margarit Garcia

Teaching methodology
Teachers will introduce the theoretical basis of the concepts, methods and results and illustrate them with examples appropriate to facilitate their understanding.
Students, independently, need to work on the materials provided by teachers in order to fix and assimilate the concepts.
Teachers will provide the syllabus and studying documents (by ATENEA).

Learning objectives of the subject
Knowledge of parameters and methods of design of the Movement Area.

Study load

<table>
<thead>
<tr>
<th>Total learning time: 75h</th>
<th>Hours large group:</th>
<th>27h</th>
<th>36.00%</th>
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<tbody>
<tr>
<td></td>
<td>Hours medium group:</td>
<td>0h</td>
<td>0.00%</td>
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<tr>
<td></td>
<td>Hours small group:</td>
<td>0h</td>
<td>0.00%</td>
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<td></td>
<td>Guided activities:</td>
<td>0h</td>
<td>0.00%</td>
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<tr>
<td></td>
<td>Self study:</td>
<td>48h</td>
<td>64.00%</td>
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| Module 1: Physical elements in the Movement Area | Learning time: 17h  
Theory classes: 6h  
Self study: 11h |
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<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Analyze parameters and methods in the runways, taxiways and aprons design</td>
</tr>
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</table>
| Module 2: Pavement design | Learning time: 14h  
Theory classes: 6h  
Self study: 8h |
| **Description:** | Analyze parameters and methods in the airport pavements design |
| **Related activities:** | Practice with the computer program of the pavement design |
| Module 3: Visual aids | Learning time: 16h  
Theory classes: 5h  
Self study: 11h |
| **Description:** | Analyze parameters and methods in the visual aids design |
| Module 4: Electrical system of the visual aids | Learning time: 20h  
Theory classes: 7h  
Self study: 13h |
| **Description:** | Analyze parameters and methods in the electrical system of the visual aids design |
| Module 5: Drainage | Learning time: 8h  
Theory classes: 3h  
Self study: 5h |
| **Description:** | Analyze parameters in the drainage design |
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Qualification system

The final grade is the result of a final exam.

Bibliography