820459 - FAOM - Computer-Aided Manufacturing

Coordinating unit: 295 - EEBE - Barcelona East School of Engineering
Teaching unit: 712 - EM - Department of Mechanical Engineering
Academic year: 2015
Degree: BACHELOR’S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Teaching unit Optional)
BACHELOR’S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Teaching unit Optional)
ECTS credits: 6
Teaching languages: Catalan, Spanish

Teaching staff
Coordinator: AMELIA NAPOLES ALBERRO
Others: ENRIQUE PORTA PASCUAL
AMELIA NAPOLES ALBERRO

Degree competences to which the subject contributes

Transversal:
1. TEAMWORK - Level 3. Managing and making work groups effective. Resolving possible conflicts, valuing working with others, assessing the effectiveness of a team and presenting the final results.

Teaching methodology
The course uses the methodology exhibition by 20%, individual work by 50% and group work (cooperative or not) by 30%.

Learning objectives of the subject
Implement and integrate the knowledge about the process of manufacturing a product.
Acquiring the ability to select and design / the process / parts manufacturing s more appropriate / s.
Using computer techniques applied to manufacturing pocesos. CAD-CAM.
Use prototyping and manufacturing techniques.

Study load

<table>
<thead>
<tr>
<th>Total learning time: 150h</th>
<th>Hours large group:</th>
<th>45h</th>
<th>30.00%</th>
</tr>
</thead>
<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>15h</td>
<td>10.00%</td>
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<td></td>
<td>Guided activities:</td>
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<td>0.00%</td>
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<tr>
<td></td>
<td>Self study:</td>
<td>90h</td>
<td>60.00%</td>
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Content

(ENG) Computer Control of CNC machine tools.

Degree competences to which the content contributes:

(ENG) Advanced CNC programming.

Degree competences to which the content contributes:

(ENG) CAM Programming Theory

Degree competences to which the content contributes:

(ENG) Technical CAD-CAM-CAE, applied to the manufacture of parts.

Degree competences to which the content contributes:

(ENG) Advanced manufacturing processes.

Degree competences to which the content contributes:

Qualification system

Method of assessment: To assess the students of the subject Automotive, will have the following qualifications obtained during the course: Np = rating practices. It is the mark obtained in the examination of the labs and the reports of the same. NEP = Note the partial examination. Nef = Note the final exam. The student's grade is as follows: nstop NEP + 0.35 = 0.35 + 0.3 Np Nef realizació In the partial and final exams, there is a part of theory and practical exercises.

Bibliography

(ENG) Computer Control of CNC machine tools.
(ENG) Advanced CNC programming.
(ENG) CAM Programming Theory
(ENG) Technical CAD-CAM-CAE, applied to the manufacture of parts.
(ENG) Advanced manufacturing processes.