Course guide
330115 - AP - Production Automation

Unit in charge: Manresa School of Engineering
Teaching unit: 750 - EMIT - Department of Mining, Industrial and ICT Engineering.
Degree: BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Optional subject).

Academic year: 2022  ECTS Credits: 6.0  Languages: Catalan

LECTURER

Coordinating lecturer: MARC BACARDIT SUBIRANA

Others:

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
1. Knowledge of discrete event-oriented systems.
2. (ENG) Modelatge en xarxes de Petri.
3. (ENG) Programació en softwares de simulació.

Transversal:
4. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 3. Communicating clearly and efficiently in oral and written presentations. Adapting to audiences and communication aims by using suitable strategies and means.
5. 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.
6. SELF-DIRECTED LEARNING - Level 3. Applying the knowledge gained in completing a task according to its relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.
7. THIRD LANGUAGE. Learning a third language, preferably English, to a degree of oral and written fluency that fits in with the future needs of the graduates of each course.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours small group</td>
<td>30,0</td>
<td>20.00</td>
</tr>
<tr>
<td>Self study</td>
<td>90,0</td>
<td>60.00</td>
</tr>
<tr>
<td>Hours large group</td>
<td>30,0</td>
<td>20.00</td>
</tr>
</tbody>
</table>

Total learning time: 150 h
CONTENTS

(ENG) Títol contingut 1: INTRODUCCIÓ A LES TÈCNICIES DE SIMUALCIÓ

Full-or-part-time: 12h
Theory classes: 6h
Laboratory classes: 6h

(ENG) Títol contingut 2: MODELAT DE SISTEMES ORIENTATS A ESDEVENIMENTS DISCRETS

Full-or-part-time: 54h
Theory classes: 12h
Laboratory classes: 12h
Self study: 30h

(ENG) Títol contingut 3: PROGRAMACIÓ, DISSENY D’EXPERIMENTS I ANÀLISIS DE RESULTATS

Full-or-part-time: 84h
Theory classes: 12h
Laboratory classes: 12h
Self study: 60h

ACTIVITIES

(ENG) TÍTOL DE L’ACTIVITAT 1: EXERCICIS DE SEGUIMENT

Full-or-part-time: 30h
Self study: 30h

(ENG) TÍTOL DE L’ACTIVITAT 2: MINIPROJECTE

Full-or-part-time: 90h
Laboratory classes: 30h
Self study: 60h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:

Complementary: