Last update: 03-07-2019

330112 - II - Industrial Informatics

Coordinating unit: 330 - EPSEM - Manresa School of Engineering

Teaching unit: 750 - EMIT - Department of Mining, Industrial and ICT Engineering

Academic year: 2019

Degree: BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2016). (Teaching unit Compulsory)
BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)

ECTS credits: 6 Teaching languages: Catalan

Teaching staff

Coordinator: ANTONI ESCOBET CANAL

Degree competences to which the subject contributes

Specific:

1. (ENG) La capacitat d'especificar, analitzar, dissenyar, avaluar i documentar sistemes basats en processadors, així com les seves alternatives d'implementació.
2. (ENG) La capacitat d'emprar les eines i els llenguatges de programació dels processadors.
3. (ENG) El coneixement i la capacitat d'emprar les eines i la instrumentació existents per a l'anàlisi, el disseny, el desenvolupament i la verificació de sistemes electrònics, informàtics i de comunicacions.

Transversal:

4. 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.
5. 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.
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.

Learning objectives of the subject

Study load

Total learning time: 150h	Hours large group:	30h	20.00%
	Hours medium group:	0h	0.00%
	Hours small group:	30h	20.00%
	Guided activities:	0h	0.00%
	Self study:	90h	60.00%

Last update: 03-07-2019

330112 - II - Industrial Informatics

Content

(ENG) 1. INTRODUCCIÓ	Learning time: 4h Theory classes: 2h Self study : 2h
(ENG) 2. EL COMPUTADOR INDUSTRIAL	Learning time: 45h Theory classes: 9h Practical classes: 10h Self study : 26h
(ENG) 3. SISTEMES D'ADQUISICIÓ I DISTRIBUCIÓ DE DADES	Learning time: 53h Theory classes: 9h Practical classes: 12h Self study : 32h
(ENG) 4. BUSOS DE CAMP	Learning time: 48h Theory classes: 10h Practical classes: 8h Self study : 30h

Last update: 03-07-2019

330112 - II - Industrial Informatics

Planning of activities

(ENG) 1. CLASSE EXPOSITIVA I DE PROBLEMES	Hours: 28h Theory classes: 28h
(ENG) 2. CLASSE DE LABORATORI	Hours: 75h Laboratory classes: 30h Practical classes: 45h
(ENG) 3. TREBALL PERSONAL INDIVIDUAL/EN GRUP	Hours: 20h Self study: 20h
(ENG) 4. PROVES	Hours: 27h Theory classes: 2h Self study: 25h

Bibliography

Basic:

Miguel Anasagasti, Pedro de. Fundamentos de los computadores. 9ª ed. Madrid: Thomson Paraninfo, 2004. ISBN 8497322940.

Rodríguez Penin, Aquilino. Comunicaciones industriales. Barcelona: Marcombo, 2008. ISBN 9788426715104.

Notes d'aplicació dels fabricants.