16214 - PROJ-U4T07 - Automatic Control Project

Coordinating unit: 340 - EPSEVG - Escola Politècnica Superior d'Enginyeria de Vilanova i la Geltrú
Teaching unit: 707 - ESAII - Department of Automatic Control
710 - EEL - Department of Electronic Engineering

Academic year: 2012
Degree: (ENG) ENGINYERIA EN AUTOMATICA I ELECTRONICA INDUSTRIAL (Syllabus 2003). (Teaching unit Compulsory)
Credits: 6

Teaching staff

Coordinator: Enric Xavier Martin Rull

Learning objectives of the subject

This subject has like objective that the students are able to raise, to realize and to direct industrial projects in the area of the automatic, from the application of scientific and technical knowledge, of aptitudes and procedures, once have been identified and valued his conditional. The subject is divided in three parts: in first the bases for the exposition, analyzes, evaluation and direction of a project will be explained; in second, raised real industrial projects like cases will be analyzed; and to third, the students will develop a mini-project of the automatic specialty.
## Content

### Elements of a project of engineering in automatic

**Description:**
Objectives
The student learns the exposition, analysis, evaluation and direction of an engineering project.

Contents
1. The project concept.
2. Methodology and type of projects.
3. Reach and phases of a project.
4. Service life.
5. Previous studies: viability of a project.
6. Budget and programming of a project.
7. Graph of Gantt and method PERT.
8. Organization and direction of a project.
9. Type of execution of a project.
10. Pursuit and control of a project.
12. Legal aspects.
14. Projects R+D

### Studies of cases of projects in the area of the automatic

**Description:**
Objectives
To study specific projects in automatization, its approaches and adopted solutions

Contents
Study of several projects in the area of the automatic and its stages:
1. Exposition of the project
2. Obtaining and analysis of the data
3. Study of viability
4. Preliminary budget and time of accomplishment
5. Selection of the best alternative
6. Detailed analysis of the selected project
7. Programming of the project
8. Organization and direction of the project
9. Plan of pursuit and control of the project
10. Plan of quality
11. Documentation
Development of mini-project in the area of the automatic

Description:
Objectives
To develop a mini-project in the area of the automatic.

Contents
1. Definition and distribution of mini-projects
2. Study of the mini-project
3. Development of the mini-project
4. Writing of the mini-project
5. Public defense of the mini-project.

Qualification system

Analysis and development of miniprojects (weeks 3.4 and 5, 20% mark)
Presentation First draft of the work to do (week 9, 25% mark)
Defense of the realized Project (weeks 13 and 14, 30% mark)
Memory of the realized Project (weeks 13 and 14, 25% mark)

Bibliography

Basic: