



## RÉGULATION ET ENTRAÎNEMENT ÉLECTRIQUE

### ELECTRIC DRIVE CONTROL

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| Lecturers : 0.0 | TC : 0.0 | PW : 4.0 | Autonomy : 0.0 | Study : 4.0 | Project : 0.0 | Language : FR

#### Objectives

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The objective of this activity is to show the concepts and technological aspects of an automated process involving an electric power drive. Through BE and TP sessions, students are encouraged to think about solutions and carry out studies to meet the specifications of a system representative of a large number of industrial applications.

**Keywords :** Regulation, correctors, power electronics converters, direct current motor

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#### Programme

- 2 hours of problem analysis (BE).
- 4 hours of experimental work on one of the two themes : control and electrical engineering (TP).
- 2 hours of capitalization and oral feedback in front of the other part of the group and a teacher (BE).

#### Learning outcomes

- Know how to distinguish the different subsystems of an automated process and those of power, of an electric drive.
- Be able to identify the setpoint, command and disturbance quantities.
- Be able to associate in the control-process chain, actuator, sensor and regulator.
- Know how to choose the structure and parameters of the necessary control law.

#### Independent study

**Objectifs :** Preparation of the oral presentation.

**Méthodes :** Construction of visual supports and associated explanations.

#### Core texts

#### Assessment

Final mark = 100% know-how  
Know-how = 100% continuous assessment