



# Introduction to Electromechanical Conversion



#### Component

École Nationale Supérieure d'Électrotechnique d'Électronique d'Informatique d'Hydraulique et des Télécommunications

#### In brief

> Code: N6AE04D

> Open to exchange students: No

### Presentation

## Objectives

- By the end of this course, students will have learned the basic principles of electromechanical energy conversion. They will understand the electrical and magnetic forces at work in most machines and actuators.
- They will have studied electric and magnetic fields and the associated forms of energy.
- They will be able to calculate electrical and magnetic quantities to determine the forces produced.

#### Pre-requisites

- The basics of electricity
- Calculation and vector operators (div, rot, grad, Laplacian, etc.)
- Cartesian and polar coordinate systems

