Advanced phenomena in electromechanical conversion

Component
École Nationale Supérieure d'Électrotechnique d'Électronique

In brief

- **Ametys Code:** N9EE26B
- **Open to exchange students:** Yes

Presentation

Objectives

Familiarize students with the various secondary phenomena involved in the advanced design of electrical machines.

Description

The design of electric machines is primarily aimed at meeting torque, speed, or position specifications for a given application. However, there are many factors that can significantly impact the design. These include vibration, thermal, and electromagnetic phenomena. An advanced understanding of these phenomena allows them to be taken into account.

Pre-requisites

- magnetostatic
- modeling of electromagnetic systems by analytical calculation