

Academic year 2024/2025

Courses offered by the programme

Génie Mécanique et Automatique (GMA) Mechanical and Control Systems Engineering

Semester(s) :

Curricula are organized in groups of courses (Unités d'Enseignement (UE)), consisting of several courses (Eléments Constitutifs (EC)). An EC is a teaching module including lectures (cours magistraux (CM)), tutorials (travaux dirigés (TD)), laboratory work (travaux pratiques (TP)), projects (PR), conferences (CONF), personal work (TA) and possibly other pedagogical activities (DIV). Some internships (stages (ST)) are compulsory

Commonly used abbreviations

**CM : Lectures
TD : Tutorials
TP : Laboratory Work
CONF : Conferences
TA : Personal Work
PR : Project
ST : Internship
DIV : Miscellaneous**

Robust Design	GMA09-CORO
Number of hours : 24.00 h	2.00 ECTS credit
CM : 0.00 h	
Reference Teacher(s) : LEOTOING Lionel	

Objectives :

The choice of an optimal mechanical solution requires the study of its robustness. The evaluation of the reliability of the product can be an efficient tool for this choice.

Content :

- 1 - Main optimization algorithms
- 2 - Introduction to Mechanical reliability
- 3 - Applications on optimization software ModeFrontier
- 4 - Project
- 5 - Lecture on industrial applications

Bibliography :

Requirements :

GMA07-CMAO2

Organisation :

1 hour per week

Evaluation :

- 1 two-hour written examination
- 1 mark for practical work

Target :