

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

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|--|-------------------------|
| Economics, Law and Business Studies A - LEAN MANAGEMENT | HUM09-PM-A |
| Number of hours : 34.00 h | 2.00 ECTS credit |
| CM : 30.00 h, TD : 4.00 h | |
| Reference Teacher(s) : | |

Objectives :

The Management Course should enable students:

to engage with «management-oriented» themes d'aborder des thèmes « orientés métiers » relative to management,
to personalise their programme by choosing modules «à la carte», in accordance with their interests and professional projects.

Each student chooses one course from the list of suggested courses.

Beyond the specific skills that are the focus of each course, the learning outcomes can be identified as follows:

to understand and know how to use the specialised vocabulary of management
to recognise the main issues in a chosen management theme
to practise teamwork: taking decisions collectively and be able to deliver within set deadlines

Lean Management (28h)

To master the theoretical concepts and practices of Lean and Six Sigma
To develop your capacity to manage and lead value-creating projects
To understand the issues of associated with a culture of continuous progress and, by extension, its implementation within an organisation

Legal Knowledge (6h)

Objectives

To acquire a general knowledge of the law
To understand the organisation and main principles of the legal environment

Content :

«Lean Management» Course Programme

Lean Management (28h)

Lean Management is a structured management method. It is increasingly becoming an approach to improve the performance of companies through improved process efficiency.

Applied to company management, « Lean Management » offers a range of methods to work towards operational excellence.

Associated with the «Six Sigma» methodology which is designed to improve quality, Lean offers an approach that ensures that all customer expectations in terms of quality, deadlines and costs are taken into account.

Programme

The content of this course develops and deepens understanding of certain notions seen in the core curriculum for 3rd Year (IMO).

Introduction to improvement

DMAIC Project

Organising and Leading a team

specific Lean tools

specific Six Sigma tools

field-oriented Lean and Six Sigma tools

feedback from industry and industrial applications

Students registered in this module will be able to participate in the Hackathon of quality and operational excellence organized in December in Nantes. This event will bring together for a whole day teams made up of 4 to 6 students from several educational institutions from Bac + 2 to Master 2 level, supervised by professionals in operational excellence, QHSE management, continuous improvement ...

Together, the students will have to take up the challenge of responding to a real business problem and proposing a relevant action plan. At the end of the day, each team will pitch their final work. The best presentation will be rewarded with a vote from the public and the jury of experts.

Legal Knowledge (6h)

sources of law, the hierarchy of rules, notion of jurisprudence;
jurisdictions;
types of law practitioners;
the contract;
civil and criminal liability in a company

Bibliography :

A specific bibliography on the themes developed is suggested to students in class

Requirements :

Eco-Management Modules in S7 and S8

Organisation :

The different Management courses bring together students from the various speciality Departments. Each course includes the participation of external speakers (industry professionals, lawyers or consultants). Interactive pedagogy and project work are favoured, with students working in teams on projects that are defined in collaboration with the speakers.

Evaluation :

Continuous Assessment: teamwork with oral and/or written assignment

Target :