

MGT-707

Product lifecycle management - concepts methods and tools

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Cursus	Sem.	Type
Advanced Manufacturing		Obl.
Robotics, Control and Intelligent Systems		Obl.

Language of teaching	English
Credits	4
Session	
Exam	Oral presentation
Workload	120h
Hours	46
Courses	20
Exercises	8
TP	18
Number of positions	

Remark

Next time: Fall 2019

Summary

The course "Product Lifecycle Management - concepts methods and tools" studies the concept and application of product lifecycle management over the whole product lifecycle.

Content

The main topics composing this course are the following:

1. Introduction to PLM and related Emerging Technologies
2. Beginning of Lifecycle (BOL) management
3. Middle of Lifecycle (MOL) management
4. End of Lifecycle (EOL) management
5. Information modeling approaches, techniques and tools
 - Students work in groups on projects using modeling tools on specific industrial case studies
6. Introduction to Petri net modeling and tools including Workflow nets, Coloured Time Petri Nets and Process Planning Petri Nets
 - Students work in groups on projects using appropriate Petri net tools on specific industrial case studies
7. Best practice of Product Embedded Information Devices (PEID) on a Closed Loop Lifecycle Management industrial case study

Note

The principal objective of this course is to provide and improve analytical thinking skills of engineering management of product related data and activities over the whole product lifecycle. Through this course, you will learn the in-depth understanding of lifecycle engineering and a clear recognition of PLM in terms of definition, components, and scope. This course will present concepts, scope, methods, operational issues, and tools of product lifecycle management. There will be particular emphasis on process and information modeling and decision making through product lifecycle.

Keywords

PLM, product modeling, information modeling, Petri nets, decision making