

MASTER OF SCIENCE IN ENGINEERING - Sustainable Product Creation

ACADEMIC YEAR 2023/2024 v.24.07.2023

SEMESTER 1	Course reference	Course	ECTS / course	ECTS / module	Teacher
Module 1.1	Common core			19	
- mandatory	> all courses must be validated to validate the module				
	MSP-42	Project Management	4		GANTENBERG Martin
I	MSP-56	Programming for Engineers (Matlab & Python)	4		KUMAR Atal
	MSP-45	Supply Chain and Logistics	4		KORNE Thomas
	MSP-11	Life Cycle Assessment and Eco Design	3		WALTERSDORFER Gregor
	MSP-50	Assembly and testing technologies	4		TENTRUP Thomas
Module 1.2	Mechanics			11	
- elective	> all courses must be validated to validate the module			-11	
Prerequisite for module 2.2	MSP-4	Assessment of Finite Element Calculations	3		MAAS Stefan SELLEN Stephan
	MSP-43	CAD and CAE	4		WOLF Claude
	MSP-47	Machine Design	4		KEDZIORA Slawomir
Module 1.3 - elective	Electrical and Computer Engineering (ECE) > all courses must be validated to validate the module			13	
Prerequisite for module 2.3	MSP-46	Sensors & signal processing	3		MYSORE RAMA RAO Bhavani Shankar
	MSP-59	Technical Energy Systems Modeling and Simulation	4		TATARINOV Dimitri
	MICS2-8	Networking	3		ENGEL Thomas
	MICS2-7	Communication Theory	3		SORGER Ulrich

SEMESTER 2	Course reference	Course	ECTS / course	ECTS / module	Teacher
Module 2.1 - mandatory	>	Common core all courses must be validated to validate the module		14	
	MSP-12 MSP-32 MSP-39 MSP-51	Product Planning & Marketing for Engineers Managerial Accounting Robotics Programming for engineers	3 3 4 4		KÖNIG Tatjana LOPATTA Kerstin KUMAR Atal CHIHI Inès
Module 2.2 - elective	Mechanics > all courses must be validated to validate the module			17	
Prerequisite for module 3.2	MSP-58 MSP-41 MSP-18 MSP-19 MSP-16	Laser technology for manufacturing Digital Factory Planning Advanced engineering materials Machine Design Exercise Advanced Control	4 3 4 3 3		To be confirmed To be confirmed USELDINGER Ralph KEDZIORA Slawomir To be confirmed
Module 2.3 - elective	Electrical and Computer Engineering (ECE) > all courses must be validated to validate the module			15	
Prerequisite for module 3.3	tbd MICS2-23 MICS2-20	Networked Feedback Systems Quality of service in computer networks Information theory and coding	5 5 5		TATARINOV Dimitri ENGEL Thomas SORGER Ulrich

SEMESTER 3	Course reference	Course	ECTS / course	ECTS / module	Teacher
Module 3.1 - mandatory	Common core > all courses must be validated to validate the module			20	
	MSP-30 MSP-38 MSP-57 MSP-61	Advanced Project / Case Study Operational excellence Integrated management systems Scientific writing and presentation skills	12 2 3 3		All Professors/Teachers KOLLA Sri VON WACHTER Friedrich MOLINA Angel
Module 3.2 - elective	Mechanics > all courses must be validated to validate the module			9	
	MSP-46 MSP-44 MEEE-5	Sensors & signal processing Electrical Energy Production Transportation and Distribution Energetics of the blast furnace	3 3 3		MYSORE RAMA RAO Bhavani Shankar HADJI-MINAGLOU Jean-Régis BANIASADI Mehdi
Module 3.3 - elective	Electrical and Computer Engineering (ECE) > all courses must be validated to validate the module			9	
	MSP-54 MSP-60	Artificial Intelligence Estimation approaches in advanced engineering systems	5 4		GIOVANNINI Francesco CHIHI Inès

SEMESTER 4	Course reference	Course	ECTS / course	ECTS / module
Module 4.1 - Mandatory		Master Thesis		30
	MSP-31	Master thesis	30	