

M.Sc. SPE – Track: Smart Factory – Suggested Curriculum Overview

1 Semester WS		Compulsory Courses		Elective Courses	
	Mechatronics and Control Techniques for Production Plants	Manufacturing Technology I		Elective Courses	Choose from these electives <ul style="list-style-type: none"> • Advanced Software Engineering • Modeling, Model Reduction and Simulation in Laser Processing - Applications • Tribology • Gear and Transmission Technology • High Precision Glass Optics Manufacturing
	Model based Systems Engineering*				
Language Courses					
	Language Course (1)				
2 Semester SS		Compulsory Courses		Elective Courses	
	Manufacturing Technology II	Production Management B		Elective Courses	Choose from these electives <ul style="list-style-type: none"> • Industrial Logistics • Production Metrology • Modeling, Model Reduction and Simulation in Laser Processing - Laser • Modeling, Model Reduction and Simulation in Laser Processing - Design • Multibody Dynamics • Welding and Joining Technologies • Battery Systems for a Sustainable Mobility • Intelligent Monitoring of Engineering Systems
	Embedded Systems*	International Factory Planning*			
Language Courses					
	Language Course (2)				
3 Semester WS		Compulsory Courses		Elective Courses	
Internship (Practical Experience)			or	Elective Courses	Choose from these electives <ul style="list-style-type: none"> • Simulation Techniques in Manufacturing Technology • Linear Control Systems • Robotic Systems
	Quality Management	Process Analysis in Manufacturing Technology*			
Language Courses					
	Linguistic Elective				
4 Semester SS		Master Thesis (six months)			

*Track specific