

M.Sc. SPE – Track: Electric Mobility Production – Suggested Curriculum Overview

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

*Track specific