

# Electric Mobility Production – Suggested Curriculum Overview

1 Semester WS		Compulsory Courses			Elective Courses					
Mechatronics and Control Techniques for Production Plants		Manufacturing Technology I	Industrial Intelligence Interlaced Quality Management		Elective Course		Elective Course			
Gear and Transmission Technology*					Choose 1-2 from these electives <ul style="list-style-type: none"> <li>• Advanced Software Engineering</li> <li>• Modeling, Model Reduction and Simulation in Laser Processing - Applications</li> <li>• Tribology</li> <li>• High Precision Glass Optics Manufacturing</li> <li>• Laser Applications</li> <li>• Simulation Techniques in Manufacturing Technology</li> <li>• Process Analysis in Manufacturing Technology</li> <li>• Power Electronics</li> <li>• Control Engineering</li> </ul>					
<b>Language Courses</b>										
German language course										
and										
2 Semester SS		Manufacturing Technology II	Production Management B			Elective Course		Elective Course	Elective Course	Elective Course
Battery Production*		Electric Mobility Components Production *	Production of Electric Drives*	Welding and Joining Technologies*		Choose 3-4 from these electives <ul style="list-style-type: none"> <li>• Multibody Dynamics</li> <li>• Modeling, Model Reduction and Simulation in Laser Processing - Laser</li> <li>• Modeling, Model Reduction and Simulation in Laser Processing - Design</li> <li>• Factory Planning</li> <li>• Industrial product development process - battery systems for hybrid and electric vehicles</li> <li>• Intelligent Monitoring of Engineering Systems</li> </ul>				
<b>Language Courses</b>										
German language course										
or										
3 Semester WS		12-week Internship			Elective Course		Elective Course			
<b>Language Courses</b>										
Linguistic Elective					Choose 1-2 from these electives <ul style="list-style-type: none"> <li>• Advanced Software Engineering</li> <li>• Modeling, Model Reduction and Simulation in Laser Processing - Applications</li> <li>• Tribology</li> <li>• High Precision Glass Optics Manufacturing</li> <li>• Laser Applications</li> <li>• Simulation Techniques in Manufacturing Technology</li> <li>• Process Analysis in Manufacturing Technology</li> <li>• Power Electronics</li> <li>• Control Engineering</li> </ul>					
<b>Language Courses</b>										
4 Semester SS		<b>Master Thesis (six months)</b>								

\*Track specific