

Production – Suggested Curriculum Overview

1 Semester WS	Compulsory Courses				Compulsory Elective Area II			
	Numerical Methods in Mechanical Engineering	Advanced Finite Element Methods	Advanced Software Engineering		Practical Introduction to FEM-Software I	Control Engineering*	Manufacturing Technology I*	Industrial Engineering and Ergonomics*
	Language Courses				and			
	German language course							
2 Semester SS	Compulsory Courses				Compulsory Elective Area I - 4 CP are to be taken			
	Continuum Mechanics	Multibody Dynamics			Porous Media Mechanics	Computational Fluid Dynamics I		
	Language Courses				and			
	German language course			Production Metrology*	Computational Modeling of Membranes and Shells*	Practical Introduction to FEM-Software II	Simulation of Discrete Event Systems	
				Modeling, Model Reduction and Simulation in Laser Processing - Laser	Intelligent Monitoring of Engineering Systems			
3 Semester WS	Compulsory Courses				Compulsory Elective Area II			
	Computational Intelligence in Engineering	Quality Management*	Simulation Techniques in Manufacturing Technology*	Production Management A*	Artificial Neural Networks in Structural Mechanics	Computational Fluid Dynamics II	Modeling, Model Reduction and Simulation in Laser Processing - Application	Molecular Mechanics and Multi-Scale Modelling of Materials
	Language Courses				and			
	Linguistic Elective							
	Elective Area Internship or Research Project							
	Mini Thesis (260 hours)		or	Industrial Internship (9 weeks)				
4 Semester SS	Master Thesis (six months)							

*Track specific