

Module guide Engineering Physics for German Students (with exchange year at USST/Shanghai)

1	Mathematik I (Differentialrechnung in einer Dimension, Lineare Algebra) 10 ECTS 8 SWS	Physik I (Optik + Photonik, Stat. Verfahren) 8 ECTS 6 SWS	W. A.meth. P.im Überblick 2 ECTS 2 SWS	Angew. E-Lehre /Elektronik 5 ECTS 4 SWS	Chemie 10 ECTS 4 SWS			
2	Mathematik II (Integralrechnung, gewöhnliche DGL) 5 ECTS 4 SWS	Physik II (Mechanik, mech. Schwingungen + Wellen) 10 ECTS 8 SWS	Englisch 3 ECTS 2 SWS	Konstruktion/CAD 5 ECTS 4 SWS		St. generale 2 ECTS 2 SWS		
3	Analog Circuits 5 ECTS 4 SWS	Mathem. III (probability theory) 4 ECTS 3 SWS	Physics (Electromagnetics) 5 ECTS 4 SWS	MATLAB 2 ECTS 2 SWS	Packaging 3 ECTS 2 SWS	Language 4 ECTS 4 SWS	Software Design (programming) 7 ECTS 6 SWS	
4	Solid State Physics 4 ECTS 4 SWS	Physical Optics 2 ECTS 2 SWS	Physics (Thermodynamics) 4 ECTS 4 SWS	Signals and Systems 4 ECTS 3 SWS	Micro-controller 5 ECTS 4 SWS	Language 4 ECTS 4 SWS	Project Microcomp. 2 ECTS 2 SWS	Digital Circuits 5 ECTS 4 SWS
5	Mathematical Methods 8 ECTS 6 SWS	Physics V (Advanced Solid State) 5 ECTS 4 SWS	Physics VI (Quantum P.Concepts, Atomic & Nuclear Phys.) 5 ECTS 4 SWS	Materials Science 5 ECTS 4 SWS	Comp. Based Meas.Technol. 5 ECTS 4 SWS	W. A.meth. Recherche/Präs 3 ECTS 2 SWS	St. generale 2 ECTS 2 SWS	
6	Practical internship 25 ECTS							Practice rel. module 2 ECTS 2 SWS
7	Student project 5 ECTS 4 SWS	Bachelor seminar 8 ECTS	Bachelor thesis 12 ECTS			Electives 5 ECTS 4 SWS		