

B.Sc. Engineering Science

			1 H			2 W			3 F			4 H			5 W			6 F			7 H																
Name			V	Ü	TWS	CP	Pr	V	Ü	TWS	CP	Pr	V	Ü	TWS	CP	Pr	V	Ü	TWS	CP	Pr															
Preliminary Online Mathematics Course		E	(6) 2																																		
Calculus & Linear Algebra 1	Bause, NN	C	2	2	1	5	6	2																													
Calculus & Linear Algebra 2	Bause, NN	C						2	2	1	5						2	2	1	5	12	3															
Programming		C											11																								
Introduction to Computer Science	Neumann		2	2			1,5																														
Programming in C	Pokahr?							2	1	3			2																								
Object Oriented Programming	Fay												1	2	3			2																			
Electrical Engineering		C											12																								
Electric Circuits	Schenke		4	2	6			2																													
Electronic Systems	Göbel							3	1	4			2																								
Electromagnetics		C																10 3																			
Electromagnetic Compatibility	Dickmann												2	2																							
Electromagnetic Fields and Waves	Stiemer												2	1	3	6																					
Engineering Mechanics	Profs MB	C	2	2	4			2	2	2	4			2	2	2	4			15	2																
Materials Science		C											11																								
Chemistry	Niemeyer		3	1	4																																
Materials Technology	Klassen							3	1	1	5			3																							
Thermal/Fluids Engineering		C																																			
Thermodynamics	Meier																	3	2	5			2														
Fluid Mechanics	Breuer																	3	2	5			2														
Communication Systems																		8 3																			
Digital Communication Systems	Zölzer												2	1	3																						
Optical Communications	Pronin												2	1	3																						
Introduction to Electro-Optics	Pronin																	2	1	3			4	1,5													
Sensor Systems																		8 3																			
Sensor Signal Processing in Navigation	Scholl												2	1	3																						
Radar and Antennas	Fickenscher												2	1	3																						
Practical Training																		3 3 3 LN																			
Drives and Propulsion		C 2/3																8 3																			
Electrical Drives	Kreischer																	2	1	3																	
Aerospace Propulsion	Dr. Neupert(Schatz)																	2	1	3																	
Combustion Engine Powered Drive Systems	Dr. Sturm (Thiemann)																	2	1	(3)																	
Control Systems		C																8 3																			
Continuous Control	Horn												2	1	3																						
Discrete Control	Niggemann												2	1	3																						
Compulsory Elective Courses		E 12 CP																																			
Vehicle Dynamics	Meywerk																																				
Mechatronics/Multibody Simulation	Sachau																	2	1	(3) (4)			A														
Design Methods	Mantwill																																				
Quality and Knowledge Management	Wulfsberg																	2	1	3			4	A													
Heat Transfer	Meier																																				
Production Engineering	Wulfsberg																	2	1	(3) (4)			A														
Sensors and Actuators	Fay																																				
																		2	1	(3) (4)			A														
Interdisciplinary Studies		E																2 2 3 A																			
Student's Project	Profs ET/MB	E																																			
Bachelor Thesis	Profs ET/MB	C																																			
Language Training 1	SPZ	C	4					4					4 8 LN																								
Language Training 2	SPZ	C																2																			
Academic English and Skills	SPZ	C																2																			
																		2 2 4 PA																			
Σ TWS	139		25					25					16					24					23					20					6				
Σ CP	180		6					23					46					26					19					34					26				
# of Examinations	34		4					4					4					3					6					8					5				
CP/TWS	1,05																																				

1,05

M.Sc. Engineering Science: Defence Systems

Name			8/1 W					9/2 F					10/3 H					11/4 W					12/5 F				
			V	ÜL	TWS	CP	PrV	ÜL	TWS	CP	PrV	ÜL	TWS	CP	PrV	ÜL	TWS	CP	PrV	ÜL	TWS	CP	PrV	ÜL	TWS	CP	PrV
Numerical Mathematics	Bause	C	2	1	3	4	1,5																				
Operating Systems & Secure Computer Networks	Klauer	C											2	2	4				8	2							
Operating Systems	Klauer																	2	2	4							
Secure Computer Networks	Klauer																										
HPC Systems and HPC Applications		E																									
Hardware Architecture of HPC Aystems	Neumann							2	2	4	4	A															
HPC Techniques and Software Development	Neumann												2	2	(3)	(4)	A										
Parallel Computing for Multiscale and Multiphysics Problems	Neumann																	2	1	(3)	(4)	A					
Special Applications of HPC in Defence Technology	Neumann																	2	4	(3)	(4)	A					
Advanced Numerical Mathematics	Bause / Stierner							2	2	4	4	A															
Computational Fluid Dynamics	Breuer							2	1	(3)	(4)	A															
Computational Electromagnetics	Stierner												2	2	(4)	(4)	A										
Computational Material Design		E																									
Continuum Mechanics	Lammering		2	1	3	4	A																				
Materials Modelling	Klassen / Höche							2	1	3	4	A															
Modelling Advanced Processing Technologies	Klassen / Höche												2	1	3	4	A										
Simulating High Strain Deformation	Klassen / Höche																	(4)	A								
Computational Design of Surfaces and Interfaces	Kramer																	2	1	3	4	A					
Statistical Thermodynamics	Meier												2	1	3	(4)	A										
Electro-Optics		E																									
High-Power Electromagnetics and Laser Systems	Dickmann (LA Sabath/Jung)																										
Technical Optics	Pronin							2	1	3	4	A						2	1	3	4	A					
Active Sonar	Fickenscher (LA Bonnett)												2	1	(3)	(4)	A										
Infrared Technologies and Applications	Pronin																	2	1	(3)	(4)	A					
Laser Technology	Kip		2	1	3	4	A																				
Pulsed Power and Applications	Stierner (LA Schneider)		2	1	(3)	(4)	A																				
Defence Systems and Technologies		E 24 CP																									
Ballistics 1 *)	NN (LA Hahlweg)							2	1	(3)	(4)	A															
Ballistics 2 *)	NN (LA Hahlweg)												2	1	(3)	(4)	A										
Failure Analysis and Maintenance	NN (LA Böllinghaus)		2	1	(3)	(4)	A																				
Improvised Explosive Devices Disposal	Niemeyer (LA Jäger)							2	1	(3)	(4)	A															
Material Handling and Warehouse Technology	Bruns (LA Ulrich)		2	1	(3)	(4)	A						2	1	(3)	(4)	A										
Electrochemical Power Sources for Mil. Appl.	Kreischer (LA Cremers)							2	1	(3)	(4)	A															
Corrosion and Corrosion Protection	Böllinghaus							2	1	(3)	(4)	A															
Protection Technologies I	Kreischer (LA Fischer)		2	1	(3)	(4)	A						2	1	(3)	(4)	A										
Protection Technologies II (Adelaide)	Kreischer (LA Fischer)							2	1	(3)	(4)	A															
Terramechanics and Off-Road Vehicle Engineering	Meywerk												2	1	(3)	(4)	A										
CBRN	Niemeyer (LA NN)							2	1	3			2	1	3	8	A										
Naval Shipbuilding	Meywerk (LA Ehrenberg)							2	1	3			2	1	3	8	A										
Systems Engineering for Land Vehicles	Meywerk (LA Scheibel)							2	1	3			2	1	3	8	A										
Ammunition and Weapon Technologies *)	Meywerk (LA Schmidt)							2	1	3			2	1	(3)	(8)	A										
Interdisciplinary Studies		E 9 CP	2		2	3	A	2		2	3	A	2		2	3	A										
International Law	Boysen				(3)																						
Transportation Law	Schuler-Harms (LA Suarez)									(3)																	
Public Procurement Law	Schuler-Harms (LA Budde)														(3)												
EU Regulations in Information Technology	LA Suarez				(3)																						
Tactics and Strategies	Beckmann														(3)												
Leadership and Psychology in Organizations	Felfe (LA Klug)														(3)												
Artificial Intelligence and Robotics	Braun				(3)																						
Scientific Research Techniques and Publishing	Stierner (LA Storjohann)														(3)												
Laboratory Project	Profs ET/MB	C																9	PA								
Master Thesis	Profs ET/MB	C																									
Σ TWS			70		11			28		21			10													30	AA
Σ CP			120		15			19		31			25													30	