



Name: _____

Matricule Number: _____ Year of Enrollment: 20____

1 st Semester				30 CP total	
1st Semester - BCC (30 CP)	Foundations of Natural and Engineering Sciences (ENG)	Introduction to Computational Engineering (4398501)		2 CP (comp.)	
		Foundations (Compulsory Elective, choose 2)		10 CP (comp. elec.)	
		2 modules	Module	Date	Signature
			Solid Mechanics (4228011)		
			Strukturdynamik GER* (4398441)		
			Fluid Mechanics (4226921)		
			Thermodynamics (SS) (4228771)		
			Systemics (SS) (4226981)		
			Mustererkennung GER* (2424571)		
			Computer Network Engineering (2416751)		
	Grundlagen des Mobilfunks GER* (2424491)				
	Elektromagn. Verträglichkeit GER* (2419061)				
Foundations of Mathematical and Computat. Sciences (MCS)	Partial Differential Equations (PDE) (1294061)		5 CP (comp.)		
	Ordinary Differential Equations (ODE) (1294051)		5 CP (comp.)		
	Algorithms & Programming (Lab) (4398481)		8 CP (comp.)		

2 nd Semester				30 CP total	
2 nd Semester – ECC (20 CP) + IDC-LEC (10 CP)	Computational Methods in Engineering Sciences (ENG)	Computational Methods (Compulsory Elective, choose 1)		5 CP (comp. elec.)	
		1 mod.	Module	Date	Signature
			Introduction to FEM (4398471)		
		Introduction to FVM (1294101)			
	Applied Mathematics and Scientific Computing (MCS)	Numerical methods for ordinary and partial differential equations		5 CP (comp.)	
		Scientific Computing (Compulsory Elective, choose 1)		5 CP (comp. elec.)	
		1 module	Module	Date	Signature
			Parallel/Distributed Computing I (4398511)		
			Methods of Uncertainty Analysis and Quantification (2540421)		
			Multi-Scale Methods (TBA)		
			Topology Optimization (2515261)		
			Multidiscipl. Design Optimization (WS) (2515251)		
			Optimierung GER* (WS/SS) (1294081)		
			Inverse Probleme GER* (irregular) (1201841)		
	Maschinelles Lernen mit neuronalen Netzen GER* (irregular) (1296591)				
		Advanced Programming – Lab (4398531)		5 CP (comp.)	
	Specialization (IDC-LEC)	Specialisation (Elective)		10 CP (2 elec.)	
2 modules		Module	Date	Signature	
		1.			
2.					

* Language of instruction is German

comp. = compulsory | comp. elec. = compulsory elective (choose from pre-set number of classes) | elec. = elective

3 rd Semester			30 CP total		
3 rd Semester - ECC (5 CP) + IDC (10 CP) + IDC-PRO (15 CP)	Computational Methods in Engineering Sciences (ENG)	Advanced Computational Methods (Compulsory Elective, choose 1)		5 CP (1 elec.)	
		1 module	Module	Date	Signature
			Nichtlineare FE – Theorie und Anwendung GER* (SS) (2529071)		
			Finite-Element-Methoden II GER* (2515011)		
			Modellierung und- FE-Diskretisierung für poröse Medien GER*		
			Introduction to Lattice-Boltzmann-Methods (4398491)		
	Simulationsmethoden der Partikeltechnik GER* (WS) (2521391)				
	Specialization (IDC-LEC)	Specialization (elective)			10 CP (2 elec.)
		2 modules	Module	Date	Signature
			3.		
4.					
Specialization Project (IDC-PRO)	N/A	All student projects have to be registered through the CSE office. For all details regarding the student project, please check the download section of the CSE homepage or reach out to the CSE office. (4228791 (written), 4228792 (presentation))		15 CP	

4 th Semester			30 CP total	
4 th Sem.- MTH (30 CP)	Master's Thesis (MTH)	N/A	For all details regarding your master's thesis reach out to the CSE office. <i>Note: All CSE master's thesis' need to be registered at the CSE office.</i>	30 CP

ADD			
ADD	Additional Courses (ADD)	N/A	1.
			2.
			3.
			4.
			5.