



Name: _____

Matricule Number: _____ Year of Enrollment: 20____

1 st Semester					30 CP total	
.p	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)			
			Pattern Recognition (SS) (2424571)/ (GER* WS)			
			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 (4312002)			
			Introduction to FVM (1294101)			
	Applied Mathematics and Scientific Computing (MCS)	Numerical methods for ordinary and partial differential equations (1294041)			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 (4398611)			
			Data-Driven Modeling (4333015)			
			Multidiscipl. Design Optimization (WS) (2515251)			
			Optimierung GER* (WS (129408)/ SS (1294083))			
			Inverse Probleme GER* (irregular) (1201841)			
			Maschinelles Lernen mit neuronalen Netzen GER* (irregular) (1296591)			
		Scientific Software Engineering – Lab (4398531)			5 CP (comp.)	
	Specialization (IDC-LEC)	Specialisation (Elective)			10 CP (2 elec.)	
		2 modules	Module	Date	Signature	
			1			
			2.			

3 rd Semester					30 CP total
3	n	Advanced Computational Methods (Compulsory Elective, choose 1)			5 CP (1 elec.)

* Language of instruction is German

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

	Computational Methods in Engineering Sciences (ENG)	1 module	Module	Date	Signature	
			Nichtlineare FE – Theorie und Anwendung GER* (SS) (2529071)			
			Finite-Element-Methoden II GER* (2515011)			
			Advanced FEM (4398771)			
			Fluid Structure Interaction (4398770)			
			Finite Element Method: Theory & Application (4310590)			
			Introduction to Lattice-Boltzmann-Methods (4398491)			
			Simulationen der Partikeltechnik GER* (WS) (2521391)			
	Specialization (IDC-LEC)	2 modules	Specialization (elective)			10 CP (2 elec.)
			Module	Date	Signature	
3.						
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.	

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