



Name: _____

Matricule Number: _____ Year of Enrollment: 20____

New exam regulation valid from winter term 2025/2026!

1. Semester (winter term)					
	CP				
MAF	5	Ordinary Differential Equations (ODE)			
	5	Partial Differential Equations (PDE)			
	5	Algorithms & Programming			
ENG	10	Solid and Structural Mechanics	Fluid Mechanics	Information Technology	Track:
		Linear Solid Mechanics	Fluid Mechanics	Nonlinear Photonics	Date:
		Introduction to FEM	Turbulent Flows	Information Theory	Signature:
CEQ	5	Career Entry Qualifications			
	30				

2. Semester (summer term)					
	CP				
MAF	5	Numerical methods for ordinary and partial different equations			
ENG	5	Solid and Structural Mechanics	Fluid Mechanics	Information Technology	
		Nonlinear Solid Mechanics	Introduction to FVM	Pattern Recognition	
CEM	10	Compulsory Electives – Choose 1-2			Date:
		Data-driven material modeling			Signature:
		Methods of uncertainty Analysis and Qualification I			
		Multi-Scale Methods			
		Scientific Software Engineering (Lab)			
		Network Security			
		Quantum Communication Networks			
		Dynamic Optimization (10 CP)			
		Numerische Lineare Algebra (10 CP, German)			
		Parallel and Distributed Computing			
ECL	5	Elective Class(es)			
		1.			Date:
					Signature:
CEQ	5	Career Entry Qualifications			
	30				

3. Semester (winter term)				
	CP			
CEM	5	Compulsory Electives - Choose 1-2	Date:	Signature:
		Nonlinear FEM		
		Advanced FEM (for structures)		
		Introduction to Lattice-Boltzmann-Methods		
		Simulationsmethoden der Partikeltechnik (GER)		
		Deterministic and Stochastic Computations ("Uncertainty II")		
		Spoken Language Processing ("Pattern Recognition II")		
		Computer Network Engineering		
		Algorithms for Solving the Euler and Navier Stokes Equations		
		Statistical methods: Optimality and high dimensionality (10 CP)		
		AI Engineering		
		Heat and Mass Transfer		
		Multidisciplinary Design Optimization (MDO)		
ECL	10	Elective Class(es)		
		1.	Date:	
			Signature:	
		2.	Date:	
			Signature:	
PRO	15	Research Project		
	30			

4. Semester (summer term)		
	CP	
MTH	30	Master Thesis

Additional Courses	
1.	
2.	
3.	
4.	
5.	

Notes:

MAF courses are compulsory and do not acquire signatures

The courses in the chosen engineering track are compulsory and not interchangeable!