	Example study paths for track "Computational Engineering"	CMS Track	Contents of COR modules that should be priorly known or selected	CMS-CE-EL1 (8 SWS)	CMS-CE-EL2 (12 SWS)
1	Electronics	CE	CMS-COR-MLD CMS-COR-NUM CMS-COR-HPC	Elektromechanical Networks (WS) (3 SWS) Future Computing Strategies in Nano-Electronic Systems (WS) (3 SWS) Coupled Simulation and Realtime Simulation (WS) (2 SWS)	Closed-loop Control in Networked Control Systems (4 SWS) (WS) System Dynamics (SS) (4 SWS) Machine Learning for Robotics (SS) (4 SWS)
2	Machine Learning and Visualization	CE	CMS-COR-MLD CMS-COR-VIZ CMS-COR-FAI	Computer Graphics 1 (WS) (4 SWS) Digitization and Data Analytics: Architectures, Methods and Consequences (SS) (4 SWS)	Computer Vision 1 (WS) (4 SWS) Machine Learning for Robotics (SS) (4 SWS) Scientific Visualization (SS) (4 SWS)
3	Software Engineering	CE	CMS-COR-SSE CMS-COR-HPC CMS-COR-MLD	Design Patterns and Frameworks (4 SWS) (WS) Digitization and Data Analytics: Architectures, Methods and Consequences (4 SWS) (SS)	Particle Methods (SS) (4 SWS) Performance Analysis of Computing Systems (WS) (4 SWS) Advanced Problem Solving and Search (SS/WS) (4 SWS)
4	Mechanics	CE	CMS-COR-MLD CMS-COR-HPC CMS-COR-SED	Multibody Dynamics - Practical Exercise (2 SWS) (SS/WS) Electromechanical networks (3 SWS) (WS) Particle Methods (4 SWS) (SS)	System Dynamics (4 SWS) (SS) Coupled Simulation and Realtime Simulation (2 SWS) (WS) Introduction to Research Software Engineering (2 SWS) (SS) Introduction to Computational Aerodynamics (4 SWS) (WS)
			Abbreviations		
			SWS	Semester-Wochen-Stunden (Hours per Week)	
			SS	Summer Semster	
			WS	Winter Semester	**Introduction to Research Software Engineering**