

	Example study paths for track "Computational Engineering"	CMS Track	Contents of COR modules that should be priority known or selected	CMS-CE-EL1 (8 SWS)	CMS-CE-EL2 (12 SWS)	Comment
1	Electronics	CE	CMS-COR-MLD CMS-COR-NUM CMS-COR-SAP	Elektromechanical Networks (WS) (3 SWS) Future Computing Strategies in Nano-Electronic Systems (WS) (3 SWS) Numerische Verfahren der Theoretischen Elektrotechnik (3 SWS) (SS) (german)	Data Visualization (WS) (4 SWS) Coupled Simulation and Realtime Simulation (WS) (2 SWS) System Dynamics (SS) (4 SWS) Wissenschaftliches Programmieren (SS) (3 SWS) (german)	not in combination with CMS-COR-VIZ possible
2	Machine Learning and Visualization	CE	CMS-COR-MLD CMS-COR-HPC 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) Scientific Visualization (WS) (4 SWS) Data Visualization (WS) (4 SWS)	not in combination with CMS-COR-VIZ possible
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 (SS/WS) (2 SWS) Electromechanical networks (WS) (3 SWS) Particle Methods (SS) (4 SWS)	System Dynamics (SS) (4 SWS) Coupled Simulation and Realtime Simulation (WS) (2 SWS) Wissenschaftliches Programmieren (SS) (3 SWS) (german) Scalable Data Engineering (WS) (4 SWS)	
			Abbreviations			
			SWS	Semester-Wochen-Stunden (Hours per Week)		
			SS	Summer Semester		
			WS	Winter Semester		