	Example study paths for track "Computational Life Science"	CMS Track	Contents of COR modules that should be priorly known or selected	Modul CMS-CLS-ELG	Modul CMS-CLS-ELV	Modul CMS-SEM	Modul CMS-CLS-TEA
			Empfehlung	**4 SWS im Sommer (2.FS) + 4 SWS im Winter (3. FS)**	**8 SWS im Winter (3. FS)**		
1	**Biomedical image analysis**	CLS	CMS-COR-MLD CMS-COR-NUM CMS-COR-SAP	Computer Vision 1 Scientific Visualization	Machine Learning 2 User Interface Engineering	Seminar Computational Life Science Seminar Visual Computing	Ideally in cooperation with students from the visual computing track
2	**Computer simulation of biological systems**	CLS	CMS-COR-HPC CMS-COR-NUM CMS-COR-SAP	Particle Methods Wissenschaftliches Arbeiten = Advanced Concepts of object-oriented Computer Languages or Finite Element Methods	Computational Fluid Dynamics Computationl Cell Biology or Biological Hydrodynamics	Seminar Computational Life Science Seminar Computational Mathematics	Ideally in cooperation with students from the computational mathematics track
3	**Bioinformatics**	CLS	CMS-COR-MLD CMS-COR-SAP CMS-COR-VIZ	Computergraphik I Genome Engineering Seminar Mathematical Biology	Machine Learning 2 Parallel Programming and High-Performance Computing	Seminar Computational Life Science Seminar Computational Mathematics	Ideally in cooperation with students from the computational mathematics track
4	**Computational Psychology**	CLS	CMS-COR-HPC CMS-COR-NUM CMS-COR-VIZ	Cognitive Neuroscience Methods Scientific Visualization Seminar Mathematical Biology	Cognitive Neuroscience Lifespan Developmental Neuroscience Machine Learning 2	Seminar Computational Life Science Seminar Computational Mathematics	Ideally in cooperation with students from the computational mathematics track
5	**Personalized Medicine**	CLS	CMS-COR-NUM CMS-COR-SAP CMS-COR-MLD	Scientific Visualization Principles of Biophysics	Machine Learning 2 Computational Cell Biology	Seminar Computational Life Science Seminar Visual Computing	Ideally in cooperation with students from the visual computing track
6	**Interactive 3D Systems for Life Sciences**	CLS	CMS-COR-VIZ CMS-COR-MLD CMS-COR-HPC	User Interface Engineering Scientific Visualizaton	Computer- and Robot-assisted Surgery Interactive Multimedia Information Retrieval	Seminar Computational Life Science Seminar Visual Computing	Ideally in cooperation with students from the visual computing track
7	**Molecular Modeling / Drug Design**	CLS	CMS-COR-HPC CMS-COR-NUM CMS-COR-SAP	Principles of Biophysics Particle Methods	Concepts of Molecular Modelling Data Visualization	Seminar Computational Life Science Seminar Computational Engineering	Ideally in cooperation with students from the visual computing track