

Semester	1				2				3				CP	Exam
Courses	L	S	E	P	L	S	E	P	L	S	E	P		
Chemistry/Biochemistry	2	-	1	1									5.0	GR
Medical Biology	2	-	-	2									5.0	GR
Anatomy/Physiology	2	-	1	1									5.0	GR
Ethics/Intellectual Property and Reg. Affairs	-	3	1	-									5.0	GR
Mechanics/Biomechanics/Fluid Mechanics	2	-	2	-									5.0	GR
Elective Mandatory Course	x	x	x	x									5.0	GR
Medical Imaging (Imaging Techniques)					2	-	-	2					5.0	GR
Control and Electrical Engineering					2	-	2	-					5.0	GR
Material Science and Processing					3	-	1	-					5.0	GR
Internship												x	10.0	GR
Elective Mandatory Course					x	x	x	x					5.0	GR
Image Guided Therapy and Theranostics									2	-	1	1	5.0	GR
Image Processing and Handling									2	-	2	-	5.0	GR
Art. Organs: Heart, Lung, Kidney, Liver support									2	-	-	2	5.0	GR
Advanced Biomaterials (Hard Tissue Implants and Prostheses & 3 D Bioprinting)									-	2	-	2	5.0	GR
Cell Culture and Tissue Engineering									-	2	-	2	5.0	GR
Systems Biology									2	-	-	2	5.0	GR
<u>Elective Mandatory Course</u>														
Introduction to Mechanobiology*	2	-	-	2					2	-	-	2	5.0	GR
Medical Statistics*	2	-	2	-					2	-	2	-	5.0	GR
Immunology and Microbiology*	2	-	-	1					2	-	-	1	5.0	GR
Bioinformatics*	2	-	1	-					2	-	1	-	5.0	GR
Experimental Medicine (Biom. Diagnostics)					-	2	1	-					5.0	GR
Biomechanics and Mechanobiology for soft biological tissues					1	-	2	-					5.0	GR
Optophysiology					2	1	-	-					5.0	GR
<u>Optional Courses</u>														
Neuroscience					-	1	-	-					2.0	P/NP
Pr. C. in Immunohistochem. Neuroscience	-	1	-	1	-	1	-	1	-	1	-	1	3.0	P/NP
Applied Physiology in connection to biomedical devices	-	1	-	-					-	-	-	-	2.0	P/NP
Selected topics of inelasticity theory	-	-	-	-					2	-	2	-	5.0	GR
Biomedical Products and Process Design	2	-	2	-					2	-	2	-	4.0	GR
Medical Statistics*	2	-	2	-					2	-	2	-	5.0	GR
Introduction to Mechanobiology*	2	-	-	2					2	-	-	2	5.0	GR
Immunology and Microbiology*	2	-	-	1					2	-	-	1	5.0	GR
Bioinformatics*	2	-	1	-					2	-	1	-	5.0	GR
MATLAB					1	-	2	-					5.0	GR
Selected topics in regard to Art. Organs					-	1	-	-					2.0	P/NP
Continuum Mechanics					2	-	1	-					5.0	GR
Porous Media Mechanics					2	-	2	-					5.0	GR
Technical organ support in Intensive Care					-	0.5	-	0.5					2.0	P/NP
Experimental Medicine (Biom. Diagnostics)					-	2	1	-					5.0	GR
Biomechanics and Mechanobiology for soft biological tissues					1	-	2	-					5.0	GR
Entrepreneurship					4	-	-	-					5.0	GR
Optophysiology					2	1	-	-					5.0	GR
Master Thesis (4th Semester)														
Master Thesis													25.0	GR
Master Thesis Colloquium													5.0	GR

*Elective Mandatory courses as well as Optional courses may be taken in the 1st or 3rd semester, except for courses with prerequisites.

Key: **L**: Lecture, **S**: Seminar, **E**: Exercise **P**: Practical Course, **P/NP**: passed /not passed **GR**: graded