

## Aufbau Studium Biomaterials Science B.Sc.

Semester 1	Introductory Mathematics (8/8)	Inorganic Chemistry (5/4)	Physics (5/4)	Programming (5/4)	Cross Cultural Management (5/4)	Introduction to Biomaterials Science (3/3)	Year 1 Fundamentals
Semester 2	Applied Mathematics (7/8)	Organic Chemistry (5/4)	Advanced Physics (5/4)	Physical Chemistry (5/4)	Metallic Materials and Testing (5/4)	Material Analysis (5/4)	
Semester 3	Static and Strength of Materials (5/4)	Business Economics and Project Management (5/4)	Cell Biology and Microbiology (5/4)	Non-metallic Materials (5/4)	Chemistry of Biopolymers (5/4)	Colloids and Rheology (5/4)	Year 2 Specific basics
Übergang: erstes Jahr - 10CP							
Semester 4	Focus Field Subject 1 (5/x)	Focus Field Subject 2 (5/x)	Biochemistry (5/4)	Biotechnology and biodegradable Materials (5/4)	Materials Technology (5/4)	Applied Materials and Corrosion (5/4)	Year 3/4 Profile development
Übergang: erstes Jahr komplett							
Semester 5	Focus Field Subject 3 (5/x)	Focus Field Subject 4 (5/x)	Tailored Materials and Surfaces (5/4)	Biocompatible Materials (5/4)	FEM and Simulation Methods (5/4)	Interdisziplinäre Group Project (5/1)	
Semester 6	Internship Semester / Semester abroad (30/-)						
Semester 7	Elective (5/x)	Technology- and Quality-Management (5/3)	Entrepreneurship Block (2/2)	Colloq. (3/-)	Bachelor Thesis (12/-)		

### Focus Field Subjects (catalogue)

Subject 1/2	Numerical Mathematics	Inorganic and Composite Materials	Technical Investment Planning	Medical Devices	Materials inspired by Nature	Modul from any other study course HSRW
Subject 3/4	Recycling and Ecology of Materials	Material Testing and Failure Analysis	Nanomaterials	Materials Simulation	Biological Reactions to Materials	

Legende:

(CP/SWS)

CP: Kreditpunkte

SWS: wöchentliche Stunden