Module Master Thesis

Module Name: Master Thesis

Module Number		Level Master	Short Name Exam
Responsible Lecturers	Prof. Dr.-Ing. Stephan Klein		
Department, Facility	THL, Applied Natural Sciences		
Course of Studies	Biomedical Engineering, Master		
Compulsory/elective	Compulsory	ECTS Credit Points	30
Semester of Studies	4	Semester Hours per Week	15
Length (semesters)	1	Workload (hours)	900
Frequency	SuSe	Presence Hours	0
Teaching Language	English	Self-Study Hours	900
Consideration of Gender and Diversity Issues	☒ Use of gender-neutral language (THL standard) ☐ Target group specific adjustment of didactic methods ☐ Making subject diversity visible (female researchers, cultures etc.)		
Applicability	Biomedical Engineering		
Remarks	None		

Module Master Thesis

Module Course Master Thesis

Course 1: Master Thesis

Course Number		Short Name	Thesis
Course Type	Thesis	Form of Learning	Presence
Mandatory Attendance	X	ECTS Credit Points	26
Participation Limit	n. a.	Semester Hours per Week	26
Group Size (practical training, exercises, …)	n. a.	Workload (hours)	780
Teaching Language	English	Presence Hours	0
Study Achievements („Studienleistung“, SL)	n. a.	Self-Study Hours	780
SL Length (minutes)	n. a.	SL Grading System	n. a.
Exam Type	Written	Exam Language	English
Exam Length (minutes)	n. a.	Exam Grading System	One-third grades
Learning Outcomes	• The students shall know about the application of current medical products in diagnosis and therapy and be able to critically evaluate data and draw conclusions. • The students shall acquire consolidated knowledge of physical, electrical, and mechanical principles applied in medical products. • The students shall independently cope with a defined problem in medical technology and be able to use creativity to develop new and original ideas and methods. • The students shall be enabled to independently develop medical products according to relevant standards. • The students shall be able to present results of their work and should have a knowledge of the non-technical implications of engineering practice. • The students shall be prepared for the international labour market and should have the ability to work and communicate effectively in national and international contexts. • The students shall apply research methods.		
Participation Prerequisites	All credits from 1st semester and at least 20 credits from 2nd semester.		
Contents	The students work on a defined task independently and present their work in writing.		
Literature	None		
Remarks	None		

Module Master Thesis

Module Course Final Examination

Course 2: Final Examination

Course Number		Short Name	Colloq
Course Type	Oral presentation	Form of Learning	Presence
Mandatory Attendance	☒	ECTS Credit Points	4
Participation Limit	n. a.	Semester Hours per Week	2
Group Size (practical training, exercises, …)	n. a.	Workload (hours)	
Teaching Language	English	Presence Hours	
Study Achievements („Studienleistung“, SL)	n. a.	Self-Study Hours	
SL Length (minutes)	n. a.	SL Grading System	n. a.
Exam Type	Oral	Exam Language	English
Exam Length (minutes)	60	Exam Grading System	One-third grades
Learning Outcomes	• The students shall know about the application of current medical products in diagnosis and therapy and be able to critically evaluate data and draw conclusions. • The students shall acquire consolidated knowledge of physical, electrical, and mechanical principles applied in medical products. • The students shall independently cope with a defined problem in medical technology and be able to use creativity to develop new and original ideas and methods. • The students shall be enabled to independently develop medical products according to relevant standards. • The students shall be able to present results of their work and should have a knowledge of the non-technical implications of engineering practice. • The students shall be prepared for the international labour market and should have the ability to work and communicate effectively in national and international contexts. • The students shall apply research methods.		
Participation Prerequisites	All credits from 1st and 2nd semester plus research internship and student conference.		
Contents	The students work on a defined task independently and present their work in oral.		
Literature	None		
Remarks	None		