Module 'Basic theory I'	**Obligatory module**	**CP 9**
Content: The module teaches the current status of the science of oral implantology by way of lectures, seminars, patient demonstrations and practical work on the phantom. In addition work will be begun on the foundations for independent scientific work.		
Aims of module and skills taught: Independent planning of simple prosthetic implant therapies on host bone.		
Frequency of module:	each semester	
Duration of module:	one semester	
Requirements for participation in the module:	None	
Language of course and examinations:	English	
Student record (performance certificates / attendance record)	Proof of attendance is to be issued at each teaching unit	
Cumulative module examinations and examination format:	One cumulative module examination per teaching unit in the form of a written assessment/essay under examination conditions	
Admission requirements for cumulative module examinations:	Attendance record for the relevant teaching unit	
Requirements for attaining CP:	Passing of the 3 cumulative module examinations	
Module supervisor:		

Teaching units:	**Type**	**SWS**	**Semester / CP**			
			1	**2**	**3**	**4**
Foundations of dental implantology	Lect.	1.5	X			
Oral diagnostics and treatment planning	Lect. / Sem.	2	X			
Technical requirements and dental assistants	Lect. / Sem.	1	X			
Methods of scientific work (I)	Lect / Sem.	0.5	X			

Preparation time: 120 hours
Processing time: 80 hours

Content of teaching units:

Foundations of dental implantology
Overview of the development of dental implantology
Anatomy and physiology
Wound healing: bone, soft tissue; wound healing deficits
Implant materials: bone replacement materials; membranes; auxiliary materials
Patient evaluation: anamnesis, absolute/relative contraindications
Tooth rehabilitation (endodontics/periodontics) or extraction

Oral diagnostics and treatment planning
Indication; classification; guidelines
Oral hygiene and pre-treatment (periodontal / tooth rehabilitation / jaw orthopaedics)
Clinical bite and function analysis, occlusion, TMJ, mucous membranes
Picture diagnostics (x-rays, CT, stereolithography)
3-D bone analysis (standard, CT supported)
Wax-up/set-up, involvement of dental laboratory
Standard positioning templates, CT-based drilling jig

Technical requirements and dental assistants
Required instruments and equipment
Hygiene regulations and their implementation
Tasks of the dental assistant
Patient preparation: anaesthetics, OP smock, ancillary medication etc.
Postoperative treatment
Emergencies, emergency management

Methods of scientific work (I)
Literature research via electronic media
Introduction to preparation of Master's dissertation
e-learning

Module 'Basic theory II'	**Obligatory module**					**CP 9**
Content: The module teaches the current status of the science of oral implantology by way of lectures, seminars, patient demonstrations and practical work on the phantom. In addition work will be begun on the foundations for independent scientific work.						
Aims of module and skills taught: Independent planning of simple prosthetic implant therapies on host bone and independent surgical and prosthetic work on the patient simulator.						
Frequency of module:	each semester					
Duration of module:	one semester					
Requirements for participation in the module:	Module 'Basic theory I'					
Language of course and examinations:	English					
Student record (performance certificates / attendance record)	Proof of attendance is to be issued at each teaching unit					
Cumulative module examinations and examination format:	One cumulative module examination per teaching unit in the form of a written assessment/essay under examination conditions					
Admission requirements for cumulative module examinations:	Attendance record for the relevant teaching unit					
Requirements for attaining CP:	Passing of the 3 cumulative module examinations					
Module supervisor:						
Teaching units:	**Type**	**SWS**	**Semester / CP**			
			1	**2**	**3**	**4**
Implant systems	Lect. / Prac.	1		X		
Standard surgical procedures	Lect. / Prac.	2		X		
Basic prosthetic treatments	Lect. / Prac.	1.5		X		
Methods of scientific work (II)	Lect. / Prac.	0.5		X		

Preparation time: 120 hours
Processing time: 80 hours

Content of teaching units:

Implant systems
Implant design (macrostructure)
Implant surfaces (microstructure)
Dental implant abutment, indexed / non-indexed abutment
Mechanical fixings, micro fissures
Aids for transfer, registration and impression
Abutments (chair side and lab side)
Prosthetic components

Standard surgical procedures
Flap design, transfer of implant position, flapless surgery
Assessment of bone quality
Bone condensing, bone expanding
Machine / manual preparation techniques
Extrication techniques
Healing periods, timing (early, late, immediate treatment records)
Improvement of structure by bone training

Basic prosthetic treatments
Temporary treatments
Techniques for the forming of emergence profiles
Taking of impressions / registration / fabrication of models / articulator
Choice of abutment and individualisation
Abutment transfer model-mouth
Occlusal anatomy and transfer of load

Methods of scientific work (II)
Assessment of scientific theory using evidence classes
Data collection, statistics, biometrics
Construction of scientific studies

Module 'Surgical techniques'	**Obligatory module**					**CP 10**
Content: The module analyses the current status of surgical techniques in oral implantology by way of lectures, seminars, patient demonstrations and practical work on the phantom.						
Aims of module and skills taught: Independent planning of complex prosthetic implant therapies and independent surgical procedures on patients.						
Frequency of module:	each semester					
Duration of module:	two consecutive semesters					
Requirements for participation in the module:	Modules 'Basic theory I' and 'Basic theory II'					
Language of course and examinations:	English					
Student record (performance certificates / attendance record)	Proof of attendance is to be issued at each teaching unit					
Cumulative module examinations and examination format:	One cumulative module examination per teaching unit in the form of a written assessment/essay under examination conditions					
Admission requirements for cumulative module examinations:	Attendance record for the relevant teaching unit					
Requirements for attaining CP:	Passing of the 4 cumulative module examinations					
Module supervisor:						
Teaching units:	**Type**	**SWS**	**Semester / CP**			
			1	**2**	**3**	**4**
Advanced surgical techniques (1)	Lect. / Prac.	1.5			X	
Advanced surgical techniques (2)	Lect. / Prac.	1.5			X	
Advanced surgical techniques (3)	Lect. / Prac.	1.5				X
Aftercare (postoperative treatment) / management of complications	Lect / Prac.	0.5				X

Preparation time: 140 hours
Processing time: 90 hours

Content of teaching units:

Advanced surgical techniques (1)
Bone augmentation using synthetic, xenogenous, allogenous materials
Membranes, membrane techniques
Bone augmentation using oral autogenous bone (block, particulated)
Sinus augmentation, one-sided/two-sided

Advanced surgical techniques (2)
Nerve transposition
Distraction osteogenesis
Extra-oral bone transplants
Microvascular reanastomosed tissue transfer
Reconstruction of severely reabsorbed maxilla and mandibule

Advanced surgical techniques (3)
Soft tissue management
Pedicle flap soft tissue transplants
Free connective tissue transplants
Free epithelial transplants
Vestibulum reconstruction

Aftercare (postoperative treatment) / management of complications
Documentation and recall
Statistics: success and survival rates, failure rates
Mucousitis and periimplantitis: diagnosis and treatment
Explantations

Module 'Implant prosthetics'	**Obligatory module**	**CP 10**
Content: The module analyses the current status of prosthetic implants in oral implantology by way of lectures, seminars, patient demonstrations and practical work on the phantom.		
Aims of module and skills taught: Independent planning of complex prosthetic implant therapies and independent prosthetic implants on patients.		
Frequency of module:	each semester	
Duration of module:	two consecutive semesters	
Requirements for participation in the module:	Modules 'Basic theory I' and 'Basic theory II'	
Language of course and examinations:	English	
Student record (performance certificates / attendance record)	Proof of attendance is to be issued at each teaching unit	
Cumulative module examinations and examination format:	One cumulative module examination per teaching unit in the form of a written assessment/essay under examination conditions	
Admission requirements for cumulative module examinations:	Attendance record for the relevant teaching unit	
Requirements for attaining CP:	Passing of the 3 cumulative module examinations	
Module supervisor:		

Teaching units:	**Type**	**SWS**	**Semester / CP**			
			1	**2**	**3**	**4**
Permanent implants	Lect. / Prac.	2			X	
Removable implants	Lect. / Prac.	2				X
Aftercare (postoperative treatment) / management of complications	Lect. / Prac.	1				X

Preparation time: 140 hours
Processing time: 90 hours

Content of teaching units:

Permanent implants
Single tooth replacement
Treatment with multiple single crowns
Bridge supplies
Tooth implant borne restorations
Procedures in the treatment chair and in the laboratory
Restorative materials (metal alloys, ceramics, composites)

Removable implants
Simple retention elements (pins , ball anchorage, magnetic attachments)
Complex retention elements (telescopics, bars)
Arrangement of remaining teeth
Procedures in the treatment chair and in the laboratory
Intraoral bonding
Structure of prosthetic bases

Aftercare (postoperative treatment) / management of complications
Documentation and recall
Statistics: success and survival rates, failure rates
Oral hygiene
Complications with technical components

Module 'Placement'	**Obligatory module**					**CP 9**
Content: This module involves the intensive supervision of students, who learn passively from teachers during the observation of live patient treatments. The treated cases will deepen the theoretical knowledge of the student, in particular through the requirement for the student to prepare and subsequently process the case in writing. This module is conducted either at the University Zahnklinik Frankfurt am Main or at an accredited teaching affiliate (teaching dental practice).						
Aims of module and skills taught: The clinical competence of the student is improved through experience of live patient treatments. The aim is the independent written and literature-based analysis of planned therapies and the demonstrated treatment stages.						
Frequency of module:	each semester					
Duration of module:	10 days					
Requirements for participation in the module:	Module 'Basic theory I'					
Language of course and examinations:	English					
Student record (performance certificates / attendance record)	Proof of attendance is to be issued					
Cumulative module examinations and examination format:	OSCE examination with anamnesis station, examination and diagnosis station with patient simulator and patient management station.					
Admission requirements for cumulative module examinations:	Attendance record					
Requirements for attaining CP:	Passing of the final module examination					
Module supervisor:						
Teaching units:	**Type**	**SWS**	**Semester / CP**			
			1	**2**	**3**	**4**
		6.5				

Preparation time: 110 hours
Processing time: 69 hours

Module 'Supervision'	**Obligatory module**					**CP 3**
Content: This module involves the independent treatment of 3 patients in either the practice or clinic to which the student has been assigned, an accredited affiliated practice or in the University Zahnklinik under the supervision of a teacher or accredited tutor, with supervision of and teaching on techniques and methods.						
Aims of module and skills taught: The clinical competence and manual skills of the student will be improved through active supervised patient treatment. The aim is the independent performance of surgical procedures and prosthetic treatments on patients and the development of critical, reflective, professional competence.						
Frequency of module:	each semester					
Duration of module:	3 days					
Requirements for participation in the module:	Module 'Placement'					
Language of course and examinations:	English					
Student record (performance certificates / attendance record)	Three performance certificates are to be issued. A performance certificate will be issued for each successful surgical procedure or prosthetic implant treatment on a patient.					
Cumulative module examinations and examination format:	Oral examination					
Admission requirements for cumulative module examinations:	5 performance certificates					
Requirements for attaining CP:	Passing of the final module examination					
Module supervisor:						
Teaching units:	**Type**	**SWS**	**Semester / CP**			
			1	**2**	**3**	**4**
		2.5				

Preparation time: 35 hours
Processing time: 20 hours

Module 'Patient Treatment'	**Obligatory module**	**CP 20**

Content: This module involves the treatment of 20 patients in a practice or clinic without the supervision of a teacher or accredited tutor. The following indications must each have been given for at least two patients:

a) Treatment of single tooth (class I), aesthetic treatment in front area
b) Bridge treatment (class IIa, b)
c) Bridge or telescopic bridge treatment (class IIc)
d) Bridge or telescopic bridge treatment (class III) in upper jaw
e) Bridge or telescopic bridge treatment (class III) in lower jaw
f) Bridge or single tooth treatment in combination with an external sinus lift

Aims of module and skills taught: The clinical competence and manual skills of the student will be improved through live patient treatment. The aim is the independent performance of surgical procedures and prosthetic treatments on the patient and the development of critical, reflective, professional competence.

Frequency of module:	each semester					
Duration of module:	two consecutive semesters; in the event of a lack of patients, the duration of this module may be extended by up to three months.					
Requirements for participation in the module:	Module 'Placement'					
Language of course and examinations:	English					
Student record (performance certificates / attendance record)	20 performance certificates are to be issued pursuant to section 13					
Cumulative module examinations and examination format:	Practical examination					
Admission requirements for cumulative module examinations:	20 performance certificates					
Requirements for attaining CP:	Passing of the final module examination					
Module supervisor:						
Teaching units:	**Type**	**SWS**	**Semester / CP**			
			1	**2**	**3**	**4**

Preparation time: 400 hours
Processing time: 200 hours

Module 'Masterthesis'	**Obligatory module**					**CP 20**
Content: The Masterthesis shall be on a topic from the field of oral implantology and shall be written independently by the student on the basis of research in relevant literature and study of scientific techniques.						
Aims of module and skills taught: The Masterthesis is designed to demonstrate that the student is in a position to independently analyse and assess a topic within the field of oral implantology within a prescribed period using scientifically recognised methods.						
Frequency of module:	each semester					
Duration of module:	6 months					
Requirements for participation in the module:	Module 'Basic theory I'					
Language of course and examinations:	English					
Student record (performance certificates / attendance record)						
Final module examination and examination format:	Completion of thesis and thesis presentation					
Requirements for attaining CP:	Passing of final module examination					
Module supervisor:						
Teaching units:	**Type**	**SWS**	**Semester / CP**			
			1	**2**	**3**	**4**

Preparation time: 550 hours
Processing time: 50 hours

Calculation of CP for the Master's study programme 'Master of Oral Implantology'

Module	**CP**
Basic theory I	9.0
Basic theory II	9.0
Surgical techniques	10.0
Implant prosthetics	10.0
Placement	9.0
Supervision	3.0
Patient treatment	20.0
Masterthesis	20.0
Total	**90**