Saveetha Institute of Medical and Technical Sciences

Vision:

To be and to be recognized for setting the standards of excellence in professional education and high quality scientific research.

Mission:

To Promote Academic Excellence, widen intellectual horizons, inculcate self discipline, and high ideals for the total personality development of individual to convert a novice into a competent professional with excellent theoretical knowledge and unsurpassed practical / clinical skills and to motivate interest in research activities, further education and social service.

Saveetha Dental College

Saveetha Institute of Medical and Technical Sciences (SIMATS)
PO CO mapping for MS (1503)

Program Outcome MS -1503	
PO1	Understanding the principles of research and biostatistics to carry out meaningful research activities
PO2	Understanding the normal biological process and the structure and function of the human body with special emphasis on the head and neck.
PO3	Understanding the normal biomechanical properties of dental implants to facilitate better treatment outcomes
PO4	Patient assessment, diagnosis, comprehensive treatment planning, prognosis and informed consent
PO5	Treatment planning Prosthetic options for partially and completely edentulous arches
PO6	Hard and soft tissue regeneration techniques
PO7	Evaluation of the outcomes of treatment, recall strategies and prognosis
PO8	Communicating and managing Implant laboratory procedures in support of patient care
PO9	Local anesthesia, pain and anxiety control including consideration of the impact of prescribing practices and substance use disorder
PO10	Communication with other health professionals, labs and technical experts to understand, interpret and include in the planning and management of various dental diseases and disorders.
PO11	Widen intellectual horizons by researching new information and contributing to the existing literature with novel discoveries to enhance the quality of health care for the society.
PO12	Digital aspects, modern workflow and 3D printing in Implant treatment modalities
PO13	Implant related failures and its management
PO14	Aetiology of aesthetic complications, Implant and prosthesis survival and success,Managing biological complications, Monitoring Peri implant tissue health, Principles of evaluating aesthetic outcomes,Principles of managing hardware Complication associated with fixed dental prosthesis
PO15	Recent advances in equipments and methods in implantology

Course Details: MSIM101 IMPLANT RESEARCH

Course Outcome		PO Mapping	
CO 1	Should have theoretical knowledge on research methodology and biostatistics.	PO1	
CO 2	Should be able to perform Systematic review of high quality	PO1	
CO 3	Should be able to design, carry out and report the findings of a study.	PO1	
CO 4	Should be competent in evidence based practices related to implant procedures	PO11	
	Outcome Evaluation (100 marks) Total Score (Formative marks-100)	**PO CO Mapping**	**Outcome Analysis**
FR C	Research poster / paper presentation / publication scores, and awards - 100 marks	CO1,CO2,CO3,CO4 PO1, PO11	74

Legend:

- FRC FORMATIVE RESEARCH - CO-CURRICULAR

Course Details:MSIM102: PRE-CLINICAL IMPLANTOLOGY

Course Outcome		PO Mapping	
CO1	Should have theoretical knowledge on implantology including Implant history, implant designs, surgical aspects ,prosthetic aspects and maintenance of implants.	PO3, PO4,	
CO2	Should have theoretical knowledge on Applied Anatomy, Applied Physiology, Pharmacology and anesthesia.	PO2	
CO3	Should have theoretical knowledge on Clinical dexterity in surgical procedures for implant placements, implant related impressions and implant prosthesis delivery.	PO5	
CO4	Ability to manipulate and utilize dental materials for chair side and laboratory procedures	PO6, PO8	
CO5	Ability to identify prosthetic components in implantology, Ability to diagnose and formulate treatment plans for all manners of edentulous clinical scenarios	PO5, PO6	
CO6	Should be competent in evidence based practices related to implant procedures	PO11	
CO7	Should be able to administer local anesthesia for various implant clinical procedures	PO9	
CO8	Should be able to communicate with patients effectively and educate them about treatment needs.	PO8	
	Outcome Evaluation (100 marks) Total Score (70 Summative, 30 Formative = 100 marks)	**PO CO Mapping**	**Outcome Analysis**
SP	Practical's (50 marks) (Case based discussion, Implant Diagnosis and Treatment Plan, Implant Case Review)	CO1,CO2, CO3,CO4, CO5,CO6, CO7,CO8 PO2, PO3, PO4, PO5, PO6, PO8, PO9,PO11	40
SV	Viva (20 marks)	PO2, PO3, PO4, PO5,	16

		PO6, PO8, PO9,PO11	
FC	Documentations of 6 implant (30 marks),	CO1,CO2, CO3,CO4, CO5,CO6, CO7,CO8 PO2, PO3, PO4, PO5, PO6, PO8, PO9,PO11	25

Legend:

- SP SUMMATIVE PRACTICAL,
- SV SUMMATIVE VIVA,
- FC FORMATIVE CLINICAL

Course Details: MSIM103: BASIC IMPLANTOLOGY-THEORY		
Course Outcome		**PO Mapping**
CO1	Should be proficient in diagnosis and treatment planning in partially edentulous and edentulous cases.	PO4, PO5

CO2	To gain knowledge on different software planning ,surgical stents and navigated surgery	PO12	
CO3	Knowledge to manage surgical and prosthetic complications	PO14	
CO4	Should know the prosthetic workflow to be followed	PO6	
CO5	Should be able to choose the appropriate prosthetic design and implant occlusion	PO5	
CO6	To Identify surgical and prosthetic components	PO6	
CO7	To know the differences in fixed and removable implant prosthesis	PO6	
	Outcome Evaluation (100 marks) Total Score (100 Summative)	**PO CO Mapping**	**Outcome Analysis**
ST	Essay (2x20=40 marks)	CO1,CO2, CO3,CO4, CO5,CO6, CO7 PO4, PO5, PO6, PO12,PO14	24
ST	Short notes (6x 10 = 60 marks)	CO1,CO2, CO3,CO4, CO5,CO6, CO7 PO4, PO5, PO6, PO12,PO14	48
Legend: • ST SUMMATIVE THEORY,			

Course Details: MSIM104: BASIC IMPLANTOLOGY-PRACTICAL			
Course Outcome			**PO Mapping**
CO1	To be able to design and plan single or multiple implants with surgical guides.		PO12
CO2	To be able to do GBR,indirect sinus lifts and socket preservation		PO6
CO3	To be able to do the digital workflow of single implant placement and immediate loading		PO12
CO4	Should be able to communicate with patients effectively and educate them about treatment needs.		PO4
	Outcome Evaluation (100 marks) Total Score (70 Summative, 30 Formative = 100 marks)	**PO CO Mapping**	**Outcome Analysis**
SP	Practical's (50 marks) (Case based discussion, Implant Diagnosis and Treatment Plan, Implant Case Review)	CO1,CO2,CO3,CO4 PO7, PO7,PO14	40
SV	Viva (20 marks)	PO4, PO6, PO12	16
FC	Documentations of 24 implant placements and restorations (30 marks)	CO1,CO2,CO3,CO4 PO6,PO12	25

Legend:

- SP SUMMATIVE PRACTICAL,
- SV SUMMATIVE VIVA,
- FC FORMATIVE CLINICAL

Course Details: MSIM105: INTERMEDIATE IMPLANTOLOGY-TERM I-THEORY			
Course Outcome		**PO Mapping**	
CO1	Should have theoretical knowledge on implantology including implant microflora, bone grafts, scaffolds/membranes, flap considerations, plasma derivatives.	PO6, PO13	
CO2	Ability to diagnose and formulate treatment plans for indirect and direct maxillary sinus lifts.	PO6	
CO3	Clinical dexterity in surgical procedures for soft tissue documentation and to work with different plasma derivatives.	PO6	
CO4	Ability to manipulate and utilize bone grafts, scaffolds/membrane and plasma derivatives.	PO6	
CO5	Ability to identify different surgical components for indirect and direct sinus surgeries.	PO6	
CO6	Should be competent in evidence based practices related to grafting procedures.	PO11	
CO7	Should be able to work with soft and hard tissue laser and piezoelectric pertaining to implantology	PO15	
CO8	Should be able to communicate with patients effectively and educate them for different hard and soft tissue grafting procedures.	PO4	
	Outcome Evaluation (100 marks) Total Score (100 Summative)	**PO CO Mapping**	**Outcome Analysis**
ST	Essay (2x20=40 marks)	CO1,CO2,CO3,CO4,CO5,CO6, CO7, CO8 PO4, PO6, PO11, PO13, PO15	24

ST	Short notes (6x 10 = 60 marks)	CO1,CO2,CO3,CO4,CO5,CO6, CO7, CO8 PO4, PO6, PO11, PO13, PO15	48

Legend:

- ST SUMMATIVE THEORY

Course Details: MSIM106: INTERMEDIATE IMPLANTOLOGY-TERM I-PRACTICALS			
Course Outcome		**PO Mapping**	
CO1	To be able to record digital impressions for full mouth implant cases	PO12	
CO2	Ability to perform free hand implant placement for full arch cases	PO15	
CO3	Ability to do full mouth bone augmentation	PO6	
CO4	Ability to manipulate and utilize dental materials for chair side and laboratory procedures	PO8	
CO5	Should be able to perform soft tissue augmentation procedures.	PO6	
CO6	Should be competent in evidence based practices related to implant procedures	PO11	
	Outcome Evaluation (500 marks) Total Score (70 Summative, 30 Formative = 100 marks)	**PO CO Mapping**	**Outcome Analysis**
SP	Practical's (50 marks)	CO1,CO2,CO3,CO4,CO5, CO6	40

	(Case based discussion, Implant Diagnosis and Treatment Plan, Implant Case Review)	PO6, PO11, PO8, PO12, PO15	
SV	Viva (20 marks)	CO1,CO2,CO3 ,CO4,CO5, CO6 PO6, PO11, PO8, PO12, PO15	16
FC	Documentations of 40 implant placements and restorations (30 marks)	CO1,CO2,CO3 ,CO4,CO5, CO6 PO6, PO11, PO8, PO12, PO15	25

Legend:

- SP SUMMATIVE PRACTICAL,
- SV SUMMATIVE VIVA,
- FC FORMATIVE CLINICAL

Course Details: MSIM107: INTERMEDIATE IMPLANTOLOGY-TERM II-THEORY		
Course Outcome		**PO Mapping**
CO1	Should have theoretical knowledge on all-on-4 concepts,zygomatic implants,strategic implants.	PO15
CO2	Should have theoretical knowledge on maxillofacial implants and patients specific implants	PO15
CO3	Clinical dexterity in special surgical procedures like PET,ridge expansion,ridge split,osseodensification and direct sinus lifts.	PO6
CO4	Theoretical knowledge on graft harvest from symphysis and ramus sites	PO6

	Outcome Evaluation (100 marks) Total Score (100 Summative)	PO CO Mapping	Outcome Analysis
ST	Essay (2x20=40 marks)	CO1,CO2,CO3,CO4 PO6, PO15	24
ST	Short notes (6x 10 = 60 marks)	CO1,CO2,CO3,CO4 PO6, PO15	48
Legend: • ST SUMMATIVE THEORY			

Course Details: MSIM108: INTERMEDIATE IMPLANTOLOGY-TERM II-PRACTICALS			
Course Outcome		**PO Mapping**	
CO1	To be able to perform screw and implant retrieval in failure cases	PO14	
CO2	To be able to diagnose and manage peri-implantitis	PO13	
CO3	Clinical dexterity in performing advanced surgical procedures like sinus lifts, ridge splits,etc	PO6	
	Outcome Evaluation (100 marks) Total Score(70 Summative, 30 Formative = 100 marks)	**PO CO Mapping**	**Outcome Analysis**
SP	Practical's (50 marks) (Case based discussion, Implant Diagnosis and Treatment Plan, Implant Case Review)	CO1,CO2,CO3 PO6, PO13, PO14	40

SV	Viva (20 marks)	CO1,CO2,CO3 PO6, PO13, PO14	16
FC	Documentations of 41 implant placements and restorations (30 marks)	CO1,CO2,CO3 PO6, PO13, PO14	25

Legend:

- SP SUMMATIVE PRACTICAL
- SV SUMMATIVE VIVA
- FC FORMATIVE CLINICAL

Course Details: MSIM109: ADVANCED IMPLANTOLOGY-SURGICAL		
Course Outcome		**PO Mapping**
CO1	Should have theoretical knowledge on navigated implant surgery, customised bone grafts,distraction osteogenesis and advanced bone grafting, full mouth grafting and full mouth implant placement.	PO15
CO2	Ability to diagnose and formulate treatment plans for navigated surgery, advanced grafting procedures and full mouth implant grafting and implant placement.	PO15
CO3	Clinical dexterity for advanced grafting procedures and to work with customised bone grafts and use of Botox and dermal fillers.	PO15
CO4	Ability to do digitised workflow for stage 1 implant placement.	PO12
CO5	Should be competent in evidence based practices related to full mouth implant placement procedures.	PO11

CO6	Should be able to communicate with patients effectively and educate them about treatment needs.	PO8

	Outcome Evaluation (100 marks) Total Score (100 Summative)	PO CO Mapping	Outcome Analysis
ST	Essay (2x20=40 marks)	CO1, CO2, CO3, CO4, CO5, CO6 PO8, PO11, PO12, PO15	24
ST	Short notes (6x 10 = 60 marks)	CO1, CO2, CO5, CO6 PO8, PO11, PO12, PO15	48

Legend:

- ST SUMMATIVE THEORY

Course Details: MSIM111: ADVANCED IMPLANTOLOGY-PRACTICALS		
Course Outcome		**PO Mapping**
CO1	Should be able to manage single implant placement in compromised bone	PO15
CO2	Clinical proficiency in immediate loading and temporization protocols	PO6
CO3	Ability to manipulate and utilize dental materials for chair side and laboratory procedures	PO10

CO4	Should be competent in evidence based practices related to implant procedures	PO11
CO5	Should be able to communicate with patients effectively and educate them about treatment needs.	PO10

	Outcome Evaluation (100 marks) Total Score(70 Summative, 30 Formative = 100 marks)	**PO CO Mapping**	**Outcome Analysis**
SP	Practical's (60 marks) (Case based discussion, Implant Diagnosis and Treatment Plan, Implant Case Review)	CO1, CO2, CO3, CO4, CO5, CO6 PO6, PO10, PO11, PO15	40
SV	Viva (20 marks)	CO1, CO2, CO3, CO4, CO5, CO6 PO6, PO10, PO11, PO15	16
FC	Documentations of 41 implant placements and restorations (30 marks)	CO1, CO2, CO3, CO4, CO5, CO6 PO6, PO10, PO11, PO15	25

Legend:

- SP SUMMATIVE PRACTICAL
- SV SUMMATIVE VIVA
- FC FORMATIVE CLINICAL