



Programme Specifications

MDS Programme

Programme:
Periodontics

Department:
Periodontics

Faculty of Dental Sciences
M.S. Ramaiah University of Applied Sciences

Programme Specifications: Periodontics

Faculty	Dental Sciences
Department	Periodontics
Programme	Master of Dental Surgery
Dean of Faculty	Dr B V Sreenivasa Murthy
Head of Department	Dr Ashwini S

- 1 **Title of The Award**
MDS in Periodontics
- 2 **Modes of Study**
Full Time
- 3 **Awarding Institution /Body**
M.S. Ramaiah University of Applied Sciences
- 4 **Joint Award**
Not Applicable
- 5 **Teaching Institution**
Faculty of Dental Sciences, M.S. Ramaiah University of Applied Sciences
- 6 **Programme Approved date by the Academic Council of the University**
May 2018
- 7 **Next Review Date:**
April 2021
- 8 **Programme Approving Regulating Body and Date of Approval**
Dental Council of India (DCI) MDS Regulations dated September 5, 2017 vide No. DE-87-2017
- 9 **Programme Accredited Body and Date of Accreditation**

- 10 **Grade Awarded by the Accreditation Body**

- 11 **Programme Accreditation Validity Duration**

- 12 **Programme Benchmark**
Dental Council of India (DCI) MDS Regulations dated September 5, 2017 vide No. DE-87-2017

13 **Rationale for the Programme**

Periodontics is a specialty of dentistry which encompasses the prevention, diagnosis and treatment of diseases of the supporting and surrounding tissues of the teeth or their substitutes and the maintenance of the health, function and esthetics of these structures and tissues. Since periodontal diseases are one of the largest causes of tooth mortality it becomes very essential to enhance awareness amongst all populations and health care professionals. Adequate knowledge of the subject is of utmost importance in early identification and proper treatment of periodontal diseases.

In the Indian population the awareness regarding periodontal health needs to be enhanced to a higher level in order to improve the quality of life amongst them. This can be achieved by providing quality education to the budding periodontists to cater to the increasing demands.

Periodontal disease has been linked to many other systemic diseases, like diabetes, cardiovascular disease, rheumatoid arthritis, Alzheimer's disease and so on. Also periodontal disease presents a serious public health problem, with millions of individuals across the globe being affected by it. Knowing the impact of periodontal health on general health, it is crucial for people to maintain healthy teeth and gums. This includes diligent home care, as well as receiving an annual comprehensive periodontal evaluation from a dental professional at least once a year. Treatment of periodontal disease in patients with systemic health problems helps improve control of the disease.

All these situations provide a huge platform for research in this specialty opening newer avenues for advances diagnosis, treatment and maintenance. This provides a strong rationale to incorporate periodontics as a specialty in dental education.

14 **Educational Aims of the Programme**

The aims of postgraduate training in Periodontics are to train the postgraduates to practice Periodontics efficiently and effectively, backed by scientific knowledge and skill. They should be able to exercise empathy and a caring attitude and maintain high ethical standards and continue to evince keen interest in continuing professional education in their specialty and allied specialties irrespective of whether in teaching or practice. The students should be willing to share the knowledge and skills with any learner, junior or a colleague. Finally to develop the faculty for critical analysis and evaluation of various concepts and views, to adopt the most rational approach.

15 **Programme Aims and Objectives**

The objective is to train a candidate so as to ensure higher competence in both general and special area of interest and prepare him for a career in teaching, research and specialty practice. A candidate must achieve a high degree of clinical proficiency in the subject matter and develop competence in research and its methodology as related to the field concerned.

The above objectives are to be achieved by the time the candidate completes the Programme.

The specific Programme aims are:

1. To impart knowledge on growth and development of stomatognathic system in general and the periodontium in particular
2. To enhance the understanding of the common oral and systemic diseases affecting the periodontium including the etiology, clinical manifestations and differential diagnosis
3. To critically analyze the various treatment options and deliver it with most efficient manner based on evidence based dentistry
4. To impart knowledge, skill in the science and practice of Oral Implantology
5. To impart training on instruments and techniques for various procedures for periodontal treatment.
6. To provide a general perspective and opportunities for a career in periodontics

16 **Intended Learning Outcomes of the Programme**

The intended learning outcomes are listed under four headings

1. Knowledge & Understanding
2. Cognitive Skills
3. Clinical Skills
4. Transferable/Capability skills

Knowledge & Understanding

After undergoing this Programme, a student will be able to:

KU1: Describe etiopathogenesis, diagnosis and management of common periodontal diseases

KU2: Explain biochemical, microbiologic and immunologic genetic aspects of periodontal pathology and the interrelationship with systemic conditions

KU3: Discuss preventive measures and treatment modalities of periodontal disease

KU4: Compare and contrast materials used in bone and tissue regeneration

Cognitive Skills

After undergoing this Programme, a student will be able to:

CS1: Differentially diagnose gingival and periodontal diseases

CS2: Recommend investigations to arrive at definitive diagnosis

CS3: Develop treatment plan for optimal restoration of oral health

CS4: Critique newer trends and technologies in periodontics

Clinical skills

After undergoing this Programme, a student will be able to:

PS1: Perform non-surgical therapy

PS2: Utilize basic and advanced surgical instruments and equipment

PS3: Perform basic and advanced surgical regenerative procedures

PS4: Demonstrate supportive periodontal therapy

Transferable Skills

After undergoing the Programme, a student will be able to:

TS1: Able to take responsibilities to overcome difficult situations

TS2: Develop a research project and make presentations

TS3: Work in a team to treat periodontal diseases in all age groups

TS4: Contribute in a multidisciplinary approach for comprehensive treatment

17 **Programme Structure**

Entire postgraduate program is a 3-year program comprising of 6 terms of 26 weeks each. Every term can be a combination of modules including Programme Specialization Module, Research Module, Faculty Common Module and an Elective Module. Each Programme specialization module will include one week of assessment. The following are the modules a student is required to successfully complete for the award of the degree

	Module Title	Module code	Credits
Programme specialization modules			
1	Preclinical phase	PGOMDR01	24
2	Clinical Phase Basics – 1	PGOMDR02	24
3	Clinical Phase Basics – 2	PGOMDR03	24
4	Clinical Phase Advanced - 1	PGOMDR04	24
5	Clinical Phase Advanced - 2	PGOMDR05	24
6	Clinical Phase Advanced - 3	PGOMDR06	20
Research modules			
1	Research Methodology	PGRM01	2
2	Short term project/Group project	PGRM02	6
3	Library Dissertation	PGRM03	4
4	Dissertation	PGRM04	18
5	Conference presentation	PGRM05	1
6	Journal publication	PGRM06	1
Faculty Common Modules			
1	Clinical photography	PGFCM01	1
2	Basic and advanced life support	PGFCM02	1
3	Personality Development and Soft Skills	PGFCM03	1
4	Law for Dental Professionals	PGFCM04	1
Elective module			
1	Training in any other institution in India or Abroad	PGEM01	3
2	Teacher training Module	PGTTM	1
	TOTAL		180

18. Module Delivery Structure

The module is delivered Monday to Saturday of the week according to time table including mandated library/laboratory time towards self- directed learning.

19 Teaching Learning Methods

Teaching and Learning Methods

1. Team Teaching/ Integrated Teaching
2. Face to Face Lectures using Audio-Visuals
3. Seminars/journal clubs/e-lectures
4. Case Based Discussions
5. Group Discussions, Debates, Presentations
6. Demonstrations on videos, computers and models
7. Clinical based learning
8. Hospital based learning
9. Laboratory work
10. Dissertation/ Group Project work
11. School visits/Outreach center visits
12. Interdepartmental meets
13. Continuing dental education programs/symposiums/workshops
14. State/National/International conferences and conventions

20 Research modules

Research modules are

1. Research Methodology

Every student shall be trained in Research Methodology in a workshop prior to starting any research project.

2. Library dissertation

Each student is expected to survey, review and critically appraise scientific literature. The students will be able to use various search engines to identify and select literature with good scientific value. This module emphasizes the student to apply good practices and guidelines of a systematic and structured literature review to collect, comprehend, sort and document the available information in open literature. In the context of reviewed contemporary research work, student acquires wider breadth of knowledge and will be able to formulate research question to be addressed in the main dissertation. The module insists on the preparation and submission of manuscript for publication..

3. Short term or Group Project

Each student is expected to carry out either a short term project in their own specialty or conduct an interdisciplinary research project as a group project. The students can choose a project from the priority areas of research of the concerned department or the Faculty and submit the synopsis of the intended project for review. A group will not have more than 5 students. The purpose of group project is that the group should be able to design a multidisciplinary research project. The students are required to develop a report for

assessment and also finalise the report in form of a manuscript and submit to the constituted committee. A committee constituted by the Academic Registrar of the Faculty shall review the synopsis of the intended research project and progress of the research project till completion.

4. Dissertation

A student should choose a project from the priority areas of research for the department and submit the finding in the form of a dissertation.

5. Conference presentation

Each student is expected to present the findings of the short-term project/group project or dissertation at the National conference of the specialty or at related disciplines. During the Programme of MDS in three years, a student is mandatorily required to present a minimum of two poster/ table clinic and two paper.

6. Journal Publication

Each student shall have submitted the manuscript of the dissertation by the end of the MDS programme before component 2.

21 Elective Module

Elective modules are

1. Training in any other university

A student can undergo training in any other university or any other organisation in a specific Programme area that falls under the broad category of his specialization either in India or abroad for two weeks. He/she need to submit a complete report on the training undergone and also make a presentation to a team of examiners as per the guidelines laid by the University.

2. Teacher Training Module

A student can undergo training in principles of pedagogy and Health profession education to prepare for a career in academics. He/she need to submit a complete report on the training undergone and also make a presentation to a team of examiners as per the guidelines laid by the University.

22 Faculty common modules

Each student is expected to undergo training in the following modules as an value added skill for his/her post-graduation

- a. Basic and Advanced Life Support
- b. Personality Development and Soft Skills
- c. Clinical Photography
- d. Law for Dental Professionals

Module specifications will contain details of aim and summary, intended learning outcomes, contents, delivery and assessment.

25 Assessment and Grading

Programme specialization Teaching Module (PSTM) 1 - 6

There are two components-

Component 1 (Continuous Evaluation of Module CEM) for PSTM 1-6

Component 2 (Programme End Exam CEE),

a. Component 1 (Continuous Evaluation of Module - CEM) for PSTM 1-5 except 2: 200 marks

There are 2 components in this module

- i. Theory component consisting of
 - a. Assignment to be submitted as a word processed document for 50 marks
 - b. Assessment as a written examination for 50 marks
- ii. Clinical component consisting of
 - a. Clinical case discussion/clinical examination for 80 marks
 - b. Viva Voce for 20 marks on the module content including assignment.

b. Component 1 (Continuous Evaluation of Module - CEM) for PSTM 2: 200 marks

There are 2 components in this module

- i. Theory component consisting of
 - a. Assignment to be submitted as a word processed document for 100 marks
- ii. Clinical component consisting of
 - a. Clinical case discussion/clinical examination for 80 marks
 - b. Viva Voce for 20 marks on the module content including assignment.

c. Component 1(Continuous Evaluation of Module – CEM) for PSTM 6: 600 marks

- i. Theory component consisting of 3 Papers same as Part II of component 2
- ii. Structured clinical exam for different exercises will be assessed for 200 marks same as component 2.
- iii. Structured Viva Voce exam for 80 marks and pedagogy for 20 marks will be conducted during clinical exam

b. Component 2 (Programme End Exam): 700 marks

Component 2 shall have a theory component, Clinical Component, Pedagogy and Viva Voce.

Theory component

Written examination shall consist of Basic Sciences (Part-I) of three hours duration shall be conducted at the end of First year of MDS Programme. Part-II Examination shall be conducted at the end of Third year of MDS Programme. Part-II Examination shall consist of Paper-I, Paper-II and Paper-III, each of three hours duration. Paper-I & Paper-II shall consist of two long answer questions carrying 25 marks each and five questions carrying 10 marks each. Paper-III will be on Essays. In Paper-III three Questions will be given and student has to answer any two questions. Each question carries 50 marks. Questions on recent advances may be asked in any or all the papers. Distribution of topics for each paper will be as follows:

Part-I

Paper-I : Applied Basic Sciences: Applied Anatomy, Physiology, and Biochemistry, Pathology, Microbiology, Pharmacology, Research Methodology and Biostatistics

Part-II

Paper-I : Normal Periodontal structure, Etiology and Pathogenesis of Periodontal diseases, epidemiology as related to Periodontics

Paper II : Periodontal diagnosis, therapy and Oral implantology

Paper III : Descriptive and analysing type question

Clinical Component

Structured clinical exam for different exercises will be assessed for 200 marks.

- i. Case discussion and performing a periodontal flap surgery for one quadrant– 140 mark
- ii. Case discussion and planning of comprehensive periodontal treatment regimen – 60 marks

Pedagogy and Viva voce Component

Structured Viva Voce exam for 80 marks and pedagogy for 20 marks will be conducted during clinical exam.

Research, Faculty common, elective modules :

These modules will be assessed as per the assessment norms as specified in the module specification. The assessment for these modules is through tests, presentations or any other method as specified in the module specification.

24 **Eligibility, Failure and Readmissions**

In case of Programme specialization teaching modules 1 – 5,

- The student is eligible for the next Programme specialization module on satisfaction of attendance requirement and obtaining 50% in Component 1.
- If a student fails in component 1, he/she is required to take up the re-sit examination in component 1 in the next opportunity with the permission of the HoD, Academic Registrar of the faculty and the Dean by paying the requisite fees.

Assessment and pass criteria for Research, Faculty common, Elective modules is set in the module specifications and followed accordingly.

25 **Attendance**

In case of Programme Specialization Teaching Module, a student is required to have a minimum attendance of 85% to be eligible to write the examination. However the Dean in consultation with HOD can condone up to 10% under special circumstances. Students who fail to achieve the minimum attendance is required to Re-Register, attend the module and take up all the components of assessment at the next offering. In case of Research modules, Faculty common modules and electives, the attendance requirement is specified in the respective module specification document.

26 **Award of Class**

As per the Academic Regulations of MDS programme

27 **Student support for Learning**

1. Module Notes
2. Reference Books in the Library
3. Magazines and Journals

4. Internet Facility
5. Computing Facility
6. Laboratory Facility
7. Staff support
8. Any other support that enhances their learning

28 **Quality Control Measures**

1. Review of Module Notes
2. Review of Question Papers and Assignment Questions
3. Student Feedback
4. Moderation of assessed work
5. Opportunities for students to see their assessed work
6. Staff Student Consultative Committee Meetings
7. Student exit feedback
8. Subject Assessment Board(SAB)
9. Programme Assessment Board(PAB)

29 Curriculum Map

Module Code	Knowledge & Understanding				Cognitive Skills				Clinical Skills			
	KU1	KU2	KU3	KU4	CS1	CS2	CS3	CS4	PS1	PS2	PS3	PS4
PGPERIO1	X	-	-	-	-	-	-	X	X	-	-	-
PGPERIO2	X	X	X	X	X	X	X	X	X	X	X	X
PGPERIO3	X	X	X	X	X	X	X	X	X	X	X	X
PGPERIO4	X	X	X	X	X	X	X	X	X	X	X	X
PGPERIO5	X	X	X	X	X	X	X	X	X	X	X	X
PGPERIO6	X	X	X	X	X	X	X	X	X	X	X	X
PGRM01	-	-	-	X	-	-	-	X	-	-	-	-
PGRM02	X	X	X	X	X	X	X	X	X	X	X	X
PGRM03	X	X	X	X	X	X	X	X	X	X	X	X
PGRM04	X	X	X	X	X	X	X	X	X	X	X	X
PGRM05	X	X	X	X	X	X	X	X	X	X	X	X
PGRM06	X	X	X	X	X	X	X	X	X	X	X	X
PGFCM01	X				X							
PGFCM02					X	X	X	X	X	X	X	X
PGFCM03				X			X	X		X		X
PGFCM04							X				X	
PGEM01				X	X	X	X	X	X	X	X	X
PGEM02					X	X	X	X	X	X	X	X

30 Capability Map

Module Code	Group work	Self learning	Research Skills	Written Communication Skills	Verbal Communication Skills	Presentation Skills	Behavioral Skills	Information Management	Personal management/ Leadership Skills
PGPERI01	X	X	X	X	X	X	X	X	X
PGPERI02	X	X	X	X	X	X	X	X	X
PGPERI03	X	X	X	X	X	X	X	X	X
PGPERI04	X	X	X	X	X	X	X	X	X
PGPERI05	X	X	X	X	X	X	X	X	X
PGPERI06	X	X	X	X	X	X	X	X	X
PGRM01	X	X	X	X	X	X	X	X	X
PGRM02	X	X	X	X	X	X	X	X	X
PGRM03	X	X	X	X	X	X	X	X	X
PGRM04	X	X	X	X	X	X	X	X	X
PGRM05	X	X	X	X	X	X	X	X	X
PGRM06	X	X	X	X	X	X	X	X	X
PGFCM01	X	X	X	X	X	X	X	X	X
PGFCM02	X	X	X	X	X	X	X	X	X
PGFCM03	X	X	X	X	X	X	X	X	X
PGFCM04	X	X	X	X	X	X	X	X	X
PGEM01	X	X	X	X	X	X	X	X	X
PGEM02	X	X	X	X	X	X	X	X	X

31 Co curricular Activities

Students are encouraged to take part in co-curricular activities like seminars, conferences, symposium, paper writing, attending industry exhibitions, project competitions and related activities to enhance their knowledge and network.

32 Cultural and Literary Activities

To remind and ignite the creative endeavors, annual cultural festivals are held and the students are made to plan and organise the activities

33 Sports and Athletics

Students are encouraged to engage in routine physical activities and also take part in annual sports and athletic events.

