



## *In the Name of God*

Islamic Republic of Iran  
Ministry of Health and Medical Education  
Deputy Ministry for Education

# Endodontics

Degree: Specialty equivalent to Master of Science

### Total Course Credits

- General basic sciences 5
- Specific basic sciences 5
- Related sciences 5
- Core courses 93

### Program Description

Orthodontics is one of the specialty courses in dentistry, which deals with the prevention, diagnosis and treatment of dental alveolar anomalies. Graduates passing the specialty and board exams held by the authorities of the Ministry of Health, Treatment and Medical Education will be certified as orthodontists.

### The General Aim

The aim of the educational curriculum is to train orthodontists who have achieved the standards of knowledge, beliefs and opinions and practical skills up to national and global standards. In addition, the graduates should be able to provide high-quality preventive and therapeutic

By considering the 10-year Prospects Document up to 2025, we aim to train knowledgeable and efficient specialists in the fields of prevention and treatment and also aim, through expanding the boundaries of knowledge in endodontics, to achieve a prominent position in this region and to significantly decrease the number of teeth extracted for endodontic reasons.

### **Duration of the course**

The specialty course of oral and maxillofacial pathology lasts 3 years (6 semesters) and is a full-time course based on the guidelines of the Council for General and Specialty Dental Courses.

### **Admission Requirements**

- B.D.S./D.M.D./D.D.S or equivalent certificates for the applicants of Specialty
- Certificate of Internship or Certificate of Practice

### **Language Requirements:**

- Language requirements: Evidence of English Proficiency on the TOEFL or IELTS tests. The minimum score for TOEFL PBT, TOEFL iBT and IELTS is 533, 72 and 5.5 respectively.
- Applicants from Persian (Farsi) Speaking countries (They shall both speak and write in Persian) who have applied for graduate Degree-based programs may be exempted, based on the decision of the department, from submitting any certificates regarding their English Language Proficiency. Nevertheless, they are required to hand in their English language certificate which meets SUMS' minimal language proficiency requirements, within one year from commencing their studies at SUMS.

### **Expected Competencies at the End of the Program**

- At the end of the program learners will be competent in the following skills:
- Accurate implementation of diagnostic tests
- Preparation of an appropriate access cavity in all the teeth
- Preparation of straight and curved root canals with hand and rotary systems
- Obturation of straight and curved root canals
- Retreatment of teeth with one or several root canals
- Carrying out root-end surgeries by placing a retrograde material
- Vital pulp therapy
- Apexogenesis
- Apexification by placing apical plugs
- Regeneration of necrotic teeth with open apices
- Management and treatment of traumatized teeth
- Fresh socket implant treatment
- Bleaching of non-vital teeth
- Forming a team to do interdisciplinary approach by being involved with different postgraduate programs for treating complicated cases
- Doing endodontic treatment for disabled people under general anesthesia

## Student Assessment (Methods and Types)

- Formative
- Summative
- Comprehensive exam

## Table of the Course

**Table 1. The general basic sciences courses in Endodontics M.Sc.**

Code of the Course	Title of the Course	Units and the Course Types			Hours			Total Units	Prerequisite
		Theoretical	Practical	Workshop	Theoretical	Practical	workshop		
1	Medical Education (1)	-	-	1	-	-	51	1	
2	Medical Education (2)	-	-	2	-	-	102	2	
3	Research Methods and EBD	-	-	2	-	-	102	2	
4	Clinical Photography*	-	-	1	-	-	51	1	
5	Medical Emergencies	-	-	0.5	-	-	24	0.5	
6	Medical Laws and Professional Ethics	-	-	1	-	-	51	1	
7	Infection Control and Patient Safety	-	-	1	-	-	51	1	
8	Clinical Management and Authority	-	-	1	-	-	51	1	
Total		-	-	9.5	-	-	483		

**Table 2. The specific basic sciences courses in Endodontics Ph.D.**

Code of the Course	Title of the Course	Units and the Course Types			Hours			Total Units	Prerequisite
		Theoretical	Practical	Workshop	Theoretical	Practical	workshop		
9	The Principles of Oral Pathology	0.5	-	-	9	-	-	0.5	
10	Oral Immunology and Microbiology	0.5	-	-	9	-	-	0.5	
11	Applied head and Neck Anatomy	-	0.5	-	-	17	-	0.5	
12	Oral and Head and Neck Histology and Microbiology	0.5	-	-	9	-	-	0.5	
13	Dental Biomaterials	0.5	-	-	9	-	-	0.5	
14	Pharmacology	0.5	-	-	9	-	-	0.5	
15	Oral Physiology and Biology	0.5	-	-	-	-	-	0.5	
Total		-	0.5	-	45	17	-	3.5	

**Table 3. The related sciences courses in Endodontics Ph.D.**

Code of the Course	Title of the Course	Units and the Course Types			Hours			Total Units	Prerequisite
		Theoretical	Practical	Workshop	Theoretical	Practical	workshop		
16	Interdisciplinary Seminar (Periodontics-Pedodontics)	0.5	-	-	9	-	-	0.5	
17	Interdisciplinary Seminar (Restorative-Prosthodontics)	0.5	-	-	9	-	-	0.5	
Total		1	-	-	18	-	-	1	

**Table 4. The core courses in Endodontics Ph.D.**

Code of the Course	Title of the Course	Units and the Course Types			Hours			Total Units	Prerequisite
		Theoretical	Practical	Workshop	Theoretical	Practical	workshop		
18	Case Presentation (1)	1.5	-	-	26	-	-	1.5	
19	Case Presentation (2)	1.5	-	-	26	-	-	1.5	
20	Case Presentation (3)	1.5	-	-	26	-	-	1.5	
21	Case Presentation (4)	1.5	-	-	26	-	-	1.5	
22	Evidence-based Endodontics	1	-	-	17	-	-	1	
23	Theoretical Endodontics (1)	6	-	-	102	-	-	6	
24	Theoretical Endodontics (2)	6	-	-	102	-	-	6	
25	Theoretical Endodontics (3)	6	-	-	102	-	-	6	
26	Theoretical Endodontics (4)	6	-	-	102	-	-	6	
27	Theoretical Endodontics (5)	6	-	-	102	-	-	6	
28	Theoretical Endodontics (6)	12	-	-	204	-	-	12	
29	Practical Endodontics (1)	-	6	-	-	204	-	6	

**Table 4. The core courses in Endodontics Ph.D. (Continued)**

Code of the Course	Title of the Course	Units and the Course Types			Hours			Total Units	Prerequisite
		Theoretical	Practical	Workshop	Theoretical	Practical	workshop		
30	Practical Endodontics (2)	-	6	-	-	204	-	6	
31	Practical Endodontics (3)	-	6	-	-	204	-	6	
32	Practical Endodontics (4)	-	6	-	-	204	-	6	
33	Practical Endodontics (5)	-	6	-	-	204	-	6	
34	Practical Endodontics (6)	-	2	-	-	68	-	2	
35	Dissertation (1)	-	-	2	2	-	102	2	
36	Dissertation (2)	-	-	2	2	-	102	2	
37	Dissertation (3)	-	2	-	-	68	-	2	
38	Dissertation (4)	-	-	-	2	-	102	2	
39	Dissertation (5)	-	-	-	2	-	102	2	
40	Journal Club (1)	1.5	-	-	-	-	-	1.5	
41	Journal Club (2)	1.5	-	-	-	-	-	1.5	
42	Journal Club (3)	1.5	-	-	-	-	-	1.5	
43	Journal Club (4)	1.5	-	-	-	-	-	1.5	
44	Journal Club (5)	1.5	-	-	-	-	-	1.5	

**Table 4. The core courses in Endodontics Ph.D. (Continued)**

Code of the Course	Title of the Course	Units and the Course Types			Hours			Total Units	Prerequisite
		Theoretical	Practical	Workshop	Theoretical	Practical	workshop		
45	Journal Club (6)	1.5	-	-	-	-		1.5	
46	Participation in Training Students (1)	-	2	-	-	68		2	
47	Participation in Training Students (1)	-	2	-	-	68		2	
48	Participation in Training Students (1)	-	2	-	-	68		2	
Total		58	40	8	8	1360	408	106	



***Important Notice:***

The above features the curriculum of the Endodontics Program designed and approved by the Iranian Ministry of Health and Medical Education. Given the fact that Shiraz University of Medical Sciences is constantly improving and updating itself to meet the international academic standards and the state of the art, and based on the availability of facilities, devices, ward, laboratories, etc. at SUMS, all the SUMS curricula are approximately 20% subject to change.