

## In the Name of God

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

## Anesthesia Degree: Bachelor of Science (BSc)

#### Total Course Credits

- General: 22
- Basic, Specialized and Internship: 92
- Field Internship: 16

#### Program Description

Bachelor of Science in anesthesia is one of the disciplines in medical sciences in which the students train in principles and methods of anesthesia, the related equipment and medication. The students also learn about taking care of patients under local and general anesthesia pre, peri, and postoperatively. Furthermore, acquiring the methods and principles of acute pain management services emergencies is within the curriculum. The graduates can work in teaching hospitals under the supervision of an anesthesiologist. The mission of the program is to train graduates who can take care of patients (under the supervision of an anesthetist) in post anesthesia care units (PACU), provide acute pain management services (APMS) and help in cardiopulmonary and cerebral resuscitation (CPCR). The vision of the program is to provide active learning, innovation, acquisition of new clinical knowledge and skills, and optimum patient care so that the program will be the best and with the highest standards in the region (Middle East).

#### Admission Requirements

Applicants must pass the National University Entrance Exam held by Testing and Assessment Organization

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

##### General Competencies\*

##### Specific Competencies and Skills

At the end of the program learners will be competent in the following skills:

- Studying the patients' records, their history of disease and informing the anesthesiologist
- Performing antiseptic measures, sterilization, cleansing and maintenance of the required instruments
- Taking care of, accompanying, and transferring the patients to the operation room
- Monitoring the anesthesia equipment and preparing the required tools and medication
- Cooperating with the doctor in monitoring the patients and recording the patients' vital signs
- Cooperating with the doctor in placing the patient in proper position for operation

- Cooperating with the anesthetist in anesthesia induction, local anesthesia and other therapeutic measures
- Cooperating with the anesthetist in bringing back patients to consciousness
- Monitoring the patients in PACU

### **Educational Strategies, Methods and Techniques\***

#### **Student Assessment (Methods and Types)**

- Formative (quizzes and midterm Exam)
- Summative (Final Exam)
- Oral and written exams, observation, clinical competence assessments
- (OSCE, OSLE, OSFE, DOPS, 360 degree evaluation competency)
- Portfolio assessment: Logbook, test results, reports, articles, certificates, promotions, etc.

### **Ethical Considerations\***

\*Note: The related document(s) can be found at <http://hcmeq.behdasht.gov.ir/>.

## Tables of the Courses

Table 1. General Courses

Code of the Course	Title of the Course	Credits			Teaching Hours			Prerequisite or Concurrent Courses
		Theoretical	Practical	Total	Theoretical	Practical	Total	
011	Islamic Thought 1	2	-	2	34	-	34	
012	Islamic Thought 2	2	-	2	34	-	34	
022	Islamic Ethics	2	-	2	34	-	34	
031	Islamic Revolution	2	-	2	34	-	34	
041	History of Islamic Culture and Civilization	2	-	2	34	-	34	
051	Thematic Commentary of the Quran	2	-	2	34	-	34	
	Persian Literature	3	-	3	51	-	51	
	General English	3	-	3	51	-	51	
	Physical Training 1		1	1	-	34	34	
	Physical Training 2		1	1	-	34	34	
	Family Planning	2	-	2	34		34	
	<b>Total</b>				<b>22</b>			

**Table 2. Basic, Specialized and Internship Courses**

Code of the Course	Title of the Course	Credits	Teaching Hours				Prerequisite or Concurrent Courses
			Theoretical	practical	internship	Total	
01	Anatomy 1	2	26	17	--	43	-
02	Anatomy 2	2	26	17	--	43	01
03	Physiology 1	2	34	-	--	34	-
04	Physiology 2	2	34	-	-	34	03
05	Physics and its Laws in Anesthesia	2	34	-	-	34	-
06	Microbiology and Sterilization	2	26	17	-	43	-
07	Biochemistry	1	17	-	-	17	-
08	Immunology	1	17	-	-	17	-
09	Psychology	2	34	-	-	34	-
010	Medical Terminology	2	34	-	-	34	-
11	Computer Application	3	34	34	-	68	-
12	Biostatistics and Research Methodology	3	43	17	-	60	-
13	Clinical Examination and Symptomatology	2	26	17	-	43	02, 04
14	Basic Principles of Pharmacology	3	51	-	-	51	03
15	Principles of First Aids	2	26	17	-	43	02, 04
16	Principles of Nursing and Practice in Operation Room	2	26	17	-	43	-
17	Physiopathology	4	68	-	-	68	02, 04, 13, 14
18	Hematology and Blood Transfusion	2	34	-	-	34	04
19	Medical Emergencies	2	26	17	-	43	15, 17
20	English for the Students of Anesthesia	3	51	-	-	51	10, General English
21	Management in Anesthesia	1	17	-	-	17	-
22	Principles of Anesthesia	3	51	-	-	51	01, 03, 05, 16

23	*Methods of Anesthesia 1	4	68	-	-	68	22, 34
24	*Methods of Anesthesia 2	4	68	-	-	68	23, 35
25	*Methods of Anesthesia 3	4	68	-	-	68	24, 36
26	Post-Anesthesia Care	2	34	-	-	34	25
27	Principles of Intensive Care	3	51	-	-	51	17
28	Principles and Methods of Pain Management	2	34	-	-	34	22
29	Familiarity with Internal Diseases and Surgery	3	51	-	-	51	17
30	Specialized Pharmacology	3	51	-	-	51	14
31	Professional Ethics in Anesthesia	1	17	-	-	17	-
32	Internship in Nursing	2	-	-	102	102	06, 16
33	Internship 1	4	-	-	204	204	22
34	Internship 2	4	-	-	204	204	23, 33
35	Internship 3	4	-	-	204	204	24, 34
36	Internship 4	4	-	-	204	204	25, 35
Total		92					

\*Due to the necessity of clinical education in the course, “Methods of Anesthesia”, the students should pass this course together with Internship 1, 2, 3 and 4 under the supervision of faculty members. At the end of each Internship course, there are oral and practical exams.

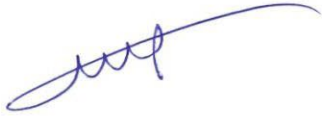
**Table 3. Internship Courses**

Code of the Course	Name of the Course	Credits	Teaching Hours
37	*Field Internship 1	8	408
38	**Field Internship 2	8	408
Total		16	816

\*Field Internship in Anesthesia 204 hours  
 Field Internship in PACU 102 hours  
 Field Internship in ICU 102 hours

\*\*Field Internship in Anesthesia 204 hours  
 Field Internship in PACU 102 hours  
 Field Internship in ICU 102 hours

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