



In the Name of God

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

Cardiac Anesthesia

Degree: Fellowship

Program Description

Recent decades have witnessed extensive advances in understanding cardiac diseases and treatment. Cardiac anesthesia fellowship is one of the services provided to cardiac patients as they need focused services; hence, we need this fellowship course in Iran due to the burden of cardiac diseases, cardiac surgeries and invasive and non-invasive cardiac procedures.

Definition and Duration of the Training Program:

Fellowship of cardiac anesthesia is a sub division of anesthesia discipline involved in patient care before, during and after cardiovascular surgeries of and related invasive procedures.

The duration of this course is 18 months.

AIMS:

1- To train skilled professionals familiar with the latest information on the treatment and management of patients before, during and after cardiac surgery. The Graduates will be able to promote health status and improve the treatment outcomes of patients undergoing cardiac surgery.

2- In next ten years we will become one of the top in the region and will become prominent in the in terms of cardiothoracic anesthesiology.

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.

Admission Requirements:

- M.B.B.S./M.D. and specialty or equivalent certificates
- Certificate of Internship or Certificate of Practice

Expected Competencies at the End of the Program

General Competencies*

Specific Competencies and Skills

Procedural skills

Anesthesia in coronary disease surgeries

Anesthesia in congenital heart disease surgeries

Anesthesia in patients undergoing valvular surgery

Anesthesia in heart emergencies

Anesthesia in major vascular surgeries

TEE in the operating room

Anesthesia in cardiac interventions outside the operating room

Anesthesia in heart transplant

Educational Strategies, Methods and Techniques *

Student Assessment (Methods and Types)

Periods of Assessment

GRS every two months

OSCE in the fifteenth months

DOPS in the sixth, ninth and fifteenth months

MCQ after six and 12 months

Ethical Considerations *

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

The overall structure of the course:

Department, unit or setting	Measures - content	Duration (months)
Operating Room, Anesthesia, Monitoring and Care of Anesthesia In Pediatric Patients During Surgery, Cardiac Surgery	Anesthesia in Cardiovascular Surgery (adults and children)	14
Introduction to Cardiac Catheterization and Electrophysiology Lab	Cardiac Internal Rotation Course, Cardiac Catheterization Procedural Skills, for example, Analgesia, Anesthesia and Local Anesthesia (for Adults and Children)	1
Intensive Care Unit of Cardiac Surgery, Diagnosis and Treatment of Patients Hospitalized in the Department, Assisting Cardiopulmonary Cerebral Resuscitation, Monitoring Care, Nutrition, Admission and Discharge	Rotation Course for Cardiovascular Surgical Intensive Care	During the Course
Cardiology Department (ECHO)	Familiarity with Principles of Echocardiography	Six Weeks During the Course
Clinic	Cardiac Anesthesiology	During the Course
Introduction to Extracorporeal Circulation	CPB Pump	During the Course
Research		During the Course
Optional Rotation (Vascular, Thorax, CCU)		1.5 Months in the Related Department

Important Notice:

The above features the curriculum of the Cardiac Anesthesia 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.