



In the Name of God

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

Cardiovascular Surgery

Degree: Subspecialty

Program Description

Establishing of Cardiovascular surgery in 40-50 years ago in Iran and training Cardiovascular Surgery Bases independently in Iran Heart Surgery Centers and developments of these wards in 20 -30 years ago, has made revision of related training courses a necessity. In 2009 there were 10 Cardiovascular Surgery Centers in Iran.

According to Scientific and Technologic development in Medicine, Newer educational and technologic Approaches to this training program seem Obligatory and also revising of the curriculum should be done.

Course Definition and Duration:

Eligible General Surgeon can Apply for this training course and after 3 years of Training they will be able to Diagnose and do surgical management of Cardiovascular Related diseases like valvular diseases, Aortic diseases, Coronary Diseases, Congenital Heart Diseases and other related problems.

Course Duration is 3 years.

Aim:

Training of Competent, Knowledgeable, liable subspecialists for service provision and Continuous Promotion in Diagnostic, Therapeutic, Preventive, Education and Research Fields of Cardiovascular Surgery

Admission Requirements

- M.B.B.S./M.D. and specialty or equivalent certificates
- 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

General Competencies*

Specific Competencies and Skills

At the end of the program learners will be competent in performing following

procedures: IMA Harvest

Sternotomy

Sternal closure

Tracheostomy

Tracheal tube (nasal /oral)

Central venous catheter insertion Cannulation for CPB

CABG

Valve replacement

Valve repair

IABP insertion

VSD closure

ASD closure

PDA closure

Femoral cannulation for CPB

Axillary cannulation

Coarctation repair

Systemic to PA shunt

Pleural Tap

Gleen Shunt

Pericardial drainage

Aortic root replacement

LV Aneurysm Repair

Aortic root enlargement

Redo sternotomy

Pericardiectomy

Redo CABG

Aortic dissection repair
Redo valve surgery
Complex valve repair
Radial Artery harvesting
Peritoneal dialysis catheter insertion
Assist devices management
Heart transplant
TOF repair
Aortic Aneurysm
PS (valvular)
Cardiac Tumors
Pulmonary Embolectomy
Complex congenital Heart diseases

Educational Strategies, Methods and Techniques*

Student Assessment (Methods and Types)

Methods	Periods Of Assessment
Log Book	Continuous
Dops	Each 2-3 months
Portofolio	Final Exam
Oral Exams	
OSCE	
MCQ	

Ethical Considerations*

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

The overall structure of the course:

Ward/Unit/Educational Field	Contents	Duration
Cardiovascular (adult –Pediatrics) wards, Operating Room, Out patients Clinics	Out -patient, In-patient Visits, Responding to Medical Consults, performing Diagnostic/Therapeutic Intervention, Preoperative Patients Preparation, operation, participation in Educational/Research program, post operative patients care, Follow ups	30 months
Cardiac ICU	Introduction to ICU equipment and usage	1month
Perfusion Pump Unit	Introduction to :CPB Basics, Equipment ...	15 days
Cardiac Anesthesia Ward	Introduction to Anesthesiology Basics, Intubation and CVP.....	15 days
Echocardiography Ward	Introduction to Echo waves and Interpretation	During the Course 2 weeks Specifically
Combined Cardiovascular and Radiology wards	Introduction to CT scan, MRI and interpretation	During the course
Angiography (Cath-Lab)	Introduction to Cardiovascular Angiography Basics	During the Course 2 weeks Specifically
CCU	Introduction to CCU Care and Cardiac Emergencies	During the Course 2 weeks Specifically
Optional	Introduction to other Fields Activities based on ward Schedules	2.5 Months
Research Fields	Purposeful ,Under supervision Researches	During the Course

Important Notice:

The above features the curriculum of the Cardiovascular Surgery 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.