

In the Name of God

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

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
 Glenn Shunt
 Pericardial drainage
 Aortic root replacement
 LV Aneurysm Repair
 Aortic root enlargement
 Redo sternotomy
 Pericardiectomy
 Redo CABG
 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://hcmeq.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

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