

In the Name of God

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

**Clinical Cardiac Electrophysiology
Degree: Fellowship**

Introduction

Diagnosis and treatment of heart rhythm disorders, including bradycardia, abnormal heartbeat, and high risk beats have increased drastically. Hence, some cardiologists tend to work in this field, which mandates offering a fellowship course to understand and treat relevant diseases. Many developed countries have opted training specialists in this fellowship. Thanks to advanced technology in this field, most diseases are diagnosed and treated in Islamic Republic of Iran; however, it is essential to develop the fellowship course of cardiac electrophysiology to set clear and systematic objectives. The development of this curriculum is hoped to help promotion of this course through identifying its different aspects.

Definition and Duration of the Training Course:

Derived from cardiology specialty, electrophysiology fellowship trains graduates engaged in diagnosis, treatment and caring of patients with heart rhythm disorders and installation of pacemakers, ICD (implantable defibrillators) and Cardiac Resynchronization Therapy (CRT) for providing the community with their specialized knowledge and skills in the fields of education, research and health services.

Course duration

The course lasts 18 months.

Aims:

- 1-To train knowledgeable, competent and committed specialists in the field of heart rhythm disorders.
- 2-To reach the international educational standards and be among the approved centers of “Heart Rhythm Society” (HER) in terms of accepting fellows through continuous optimization and offering the most favorable educational programs.
- 3-To be among the reputable international centers and top the region in this field.

Admission Requirements:

Following are authorized to enter this course:

1. Cardiologists
2. Adult cardiology specialists from internal medicine

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:

Procedural Skills (Diagnostic-Therapeutic Measures)

EPS(Electrophysiology Study) Ablation
 Septostomy
 PPM (Permanent Pacemaker)
 ICD(Implantable Cardioverter-Defibrillator)
 CRT(Cardiac Resynchronization Therapy)
 ILR (Implantable Loop Recorder)
 HUTT(Head-up tilt table test)
 PPM Analysis
 ICD Analysis
 CRT Analysis
 Complex Ablation
 (AF, Ischemic VT, Epicardial)
 LAA closure((Left Atrial Appendage Closure)
 ICE (Intracardiac Echocardiography)

Educational Strategies, Methods and Techniques*

Student Assessment (Methods and Types)

Assistants' assessment will take place every 8 months, two exams in total, in the form of DOPS or OSCE.

Ethical Considerations*

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

The overall structure of the course:

Department, , unit, or setting	Syllabus- Measures	Duration (month)
Clinic	Outpatient visits, triage, filing medical records, and hospitalizing patients, following up the expert consultations given to the patients, performing outpatient procedures, educating the lower-level classes, responding to expert consultations requested, participating in Holter interpretation, analysis of pacemaker and ICD and other measures in accordance with organized programs of the ward	Two days a week during the course 17 months
Inpatients	Visiting hospitalized patients, patient care, stabilizing the patients hospitalized in the ward, performing diagnostic-therapeutic procedures at the bedside, educating the lowerlevel classes, and other measures in accordance with organized programs of the ward	Every day 17 months

Operating room	Participating in procedures by observing, assisting or performing independently according to the program organized by the ward.	At least three days a week during the course and as per case
Rotating department (1) Echocardiography	Familiarity with principles of echocardiography in patients with heart failure and candidates for cardiac resynchronization therapy, and any required examinations for clinical cardiac electrophysiology according to discretion of director of the echocardiography department	One month during the course
Rotating department (2) Researches	Familiarity with the principles and provisions of scientific and regional studies, and researches in the field of electrophysiology and related sciences in coordination with the director of the research department	One month during the course
Rotating department (3) Cardiac surgery	Familiarity with the basic principles of cardiac surgery in patients with heart failure and cardiac arrhythmias such as the Maze procedure and epicardial lead placement and participating in the operations with permission and coordination with the related surgeon	One month during the course
Optional ward		

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