



In the Name of God

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

Minimally Invasive Surgery in General Surgery

Degree: Fellowship

Program Description

Minimally invasive surgeries have expanded significantly in all areas of surgery during the past few decades due to the development of technology and its impact on clinical medicine, particularly surgery. Most science producing countries have adopted this fellowship in general surgery. The surgeons' willingness to participate in short and medium-term training courses and patients' growing demands for such surgical procedures have increased the need for implementing this fellowship course. Furthermore, according to the Vision Document of the Islamic Republic of Iran, we should move toward becoming the center of excellence in the Middle East.

Minimally invasive surgery in general surgery was first approved by the Council of Graduate Medical Education on January 31, 2007 and was implemented in Iran University of Medical Sciences. After being completed, the curriculum was approved in the fourth meeting of the Policy Committee of Course Development on September 8, 2010. The compilation committee prepared this curriculum utilizing the experiences available in the world and the experts' opinions in Iran and then, the curriculum was offered to the executive universities.

Definition and Duration of the training Program:

Minimally invasive surgery in general surgery is a course for empowering the general surgeons to perform surgical procedures in the field of general surgery through minimally invasive techniques.

The duration of this course is 18 months.

Aims:

In next 10 years, we will be one of the top countries in the Middle East in terms of educational and service standards and science production.

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 (diagnostic-therapeutic procedures):

Preparing devices (devices that are used in surgeries)

Video recording of surgical procedures

Editing the videos of surgical procedures

Proper insertion and removal of trocar (safe access)

Extracorporeal knot

Diagnostic laparoscopy

Biopsy

Cholecystectomy

Appendectomy

ADhesiolysis

Esophagectomy

Esophageal myotomy

Fundoplication

Repair of diaphragm hernia
Repair of diaphragm hernia
Different types of morbid obesity surgeries
Different types of gastrectomy
Different types of vagotomy and pyloroplasty
Splenectomy
Adrenalectomy
Different types of pancreatectomy
Hepatic hydatid cystectomy
Different types of hepatectomy
Biliary tract surgical procedures
Resection and anastomosis of the small intestine
Resection and anastomosis of the colon
Inguinal hernia repair
Abdominal and chest trauma (diagnosis and treatment)
Different types of thoracoscopy
Gastrointestinal endoscopy in surgery patients
Other minimally invasive surgeries related to the field of general surgery
Single-port surgery
Repair of abdominal wall hernia and Incisional Hernia

Educational Strategies, Methods and Techniques *

Student Assessment (Methods and Types)

Assessment Methods:

Oral, DOPS, log book assessment
Portfolio assessment, including records and certificates of educational activities, articles and writings, the results of previously done assessments, incentives, etc.

Periods of Assessment:

Continuous assessment through log book
Every three months and at the end of the course

Ethical Considerations *

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

The overall structure of the course:

Educational ward, unit, or setting	Syllabus - Measures	Duration (month)
Clinic	Outpatient visit, selecting, filling medical records, and hospitalizing patients- follow up the expert consultations given to the patients, performing outpatient procedures, teaching the lower-level classes, responding to expert consultations requested, and other measures in accordance with the curriculum organized by the ward	At least two days a week during the course (15months)
Inpatient	Visiting inpatients, patient care, stabilizing the inpatients, performing diagnostic-therapeutic procedures at the bedside, teaching the lower-level classes, and other measures in accordance with the curriculum organized by the ward	6 days a week during the course
Operating room	Participating in surgical procedures by observing, assisting or performing independently according to the curriculum organized by the ward	At least two days a week during the course
Procedure room and dry lab	Participating in surgical procedures by observing, assisting or performing independently according to the curriculum organized by the ward	At least two days a week during the course
Minimally Invasive Gynecologic Surgery unit	Based on the Program	1 month
Endourology unit	Based on the Program	1 month
Animal Lab. and Wet Lab.	Based on the Program 17	One day a week during the course
Gastroenterology unit	Gastrointestinal Endoscopy and ERCP	
Elective ward	Based on the Program	As per case during the course

Important Notice:

The above features the curriculum of the Minimally Invasive Surgery in General 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.