



*Faculty of Medicine*  
*Suez Canal University*

*Cardiothoracic Department*  
*Program Specification M.D.*

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## ***PROGRAM SPECIFICATIONS***

*Program Title:*

**M.D. of Cardiothoracic  
Surgery**

*Code:*  
***CSCS***



## Program Specification

### A- Basic Information

1- Program Title: **MD of Cardio-thoracic surgery**

2- Program Type: **Single**  **Double**  **Multiple**

3- Department (s): **Cardio-thoracic surgery (CTS) Department**

4- Coordinator: **Prof. Hamdy Al-Ayouty.**

5- External Evaluator(s): **Prof. Ahmed Mohamed Deebes.**

6- **Last date of program specifications approval:** the bylaws of the MD program in Cardiothoracic Surgery in the Faculty of Medicine, Suez Canal University were approved by the Supreme Council of Universities on 2016.

7- **Date of program specification revision approval:** October 2019.

8- **Number of credit points for this degree: 180 CP**

### B- Professional Information

#### 1- Program Aim

**By the end of the course candidate should have:**

1-The capacity to catch the proper clinical diagnosis and select the proper modality of investigation for all cardiothoracic and vascular diseases.

2-Solid grounding in the making of the most proper decision of management for all cardiothoracic and vascular diseases.

3-The ability to design a research article for estimating the relatively long term outcome of management and can be submitted to a regional or international scientific journal.

#### 2. Intended Learning Outcomes (ILOs) of the program

*By the end of this program, students should be able to:*

##### *a) Knowledge and Understanding:*

a.1 Identify the principles of evidence-based medicine. Demonstrate proficiency in evaluating and presenting findings from appropriate peer-reviewed journals.

a.2 Recognize the principles of the basic and clinical sciences necessary for effective consultation in CTS.

a.3 Determine clinically optimal yet cost-effective management.



- a.4 Recognize the unique aspects of cardiothoracic surgery practice as modified by patient age and other patient population characteristics, especially aspects of pediatric and geriatric practice.
- a.5 Demonstrate the principles of clinical research design, implementation, and interpretation.
- a.6 Explain the various levels of evidence in medicine and their translation into evidence-based practice.
- a.7 Outline a study that can be used to validate methodologies and parameters of clinical utility for the implementation and continuing use of new evidence-based analyses in the local setting.
- a.8 Discuss the anatomy of the thorax, neck and abdomen in details and correlate anatomical relations and symptoms.
- a.9 Identify the impact of pathology in diagnosis, prognosis and patient care.

### ***b) Intellectual Skills***

- b1. Apply problem solving skills in different profession situations.
- b2. Use all relevant information resources to evaluate evidence-based information
- b3. Evaluate and present findings from appropriate peer-reviewed journals.
- b4. Integrate the basic and clinical sciences necessary for effective consultation in cardiothoracic surgery
- b5. Interpret efficiently the collected data from the patients to reach the proper diagnosis.
- b6. Plan management of the cardiothoracic problems in an integrated manner.
- b7. Use proficiency programs to improve cardiothoracic surgery practices.
- b8. Use clinical problems and clinical inquiries to identify process improvements to increase patient safety.
- b9. Detect and refer the patients who will need for advanced health care beyond his capabilities.
- b10. Critically assess the scientific literature.
- b11. Practice continuous self learning and self evaluation skills.
- b12. Formulate a research hypothesis based on evidence and apply the appropriate methods to assess the validity of this hypothesis.
- b13. Design a research article that can be submitted to a regional or international scientific journal.
- b14. Write and evaluate report about different aspects of the patient conditions

### ***c) Professional and Practical Skills***

- c.1 Take a comprehensive patient history.
- c.2 Perform medical examination in general and detailed cardiothoracic clinical examination with proper interpretation.
- c.3 Demonstrate compassion: be understanding and respectful of patients, their families, and the staff and physicians caring for them.
- c.4 Interact with others without discriminating on the basis of religious, ethnic, sexual, or educational differences.
- c.5 Demonstrate positive work habits, including punctuality, dependability, and professional appearance.



- c.6 Demonstrate a responsiveness to the needs of patients and society that supersedes self-interest.
- c.7 Demonstrate principles of confidentiality with all information transmitted both during and outside of a patient encounter.
- c.8 Perform all surgical procedures required in the course specifications and decide methods to use in different circumstances.
- c.9 Demonstrate the ability to provide direct communication to the referring physician or appropriate clinical personnel when interpretation of a cardiothoracic assay reveals an urgent, critical, or unexpected finding and document this communication in an appropriate fashion.
- c.10 Conduct both individual consultations and presentations at multidisciplinary conferences that are focused, clear, and concise.
- c.11 Demonstrate skills in obtaining informed consent, including effective communication to patients about procedures, alternative approaches, and possible complications.
- c.12 Use new technology and up to date methodology to improve his/her medical and surgical skills
- c.13 Demonstrate skills in educating colleagues and other healthcare professionals:
  - (1) Demonstrate the ability to help other residents obtain proficiency in cardiothoracic surgery;
  - (2) Demonstrate the ability to work well with medical personnel and to present cardiothoracic surgery concepts to them effectively in continuing education settings and in the day-to-day management

#### *d) General and Transferable Skills*

- d.1 Practice presentation skills
- d.2 Evaluate subordinates, peers & program
- d.3 Argue different ideas effectively
- d.4 Manage time and resources and set priorities;
- d.5 Practice effective teaching and mentor to others
- d.6 Practice working effectively within a team.
- d.7 Practice efficient Information and Communication Technology (ICT) skills
- d.8 Practice continuous self learning skills.

### **3- Academic Standards**

#### **3a - External References for Standards (Benchmarks)**

- The generic Academic Reference Standards (ARS) of NAQAAE for Postgraduate

#### **3b - Comparison of Provision to External References see attachment**

### **4- Curriculum Structure and Contents**

**4a- Program duration:** The program lasts for a minimum of 3 academic years and maximum 5 years, as specified in the internal bylaws for postgraduate studies based on credit points system in the Faculty of Medicine, Suez Canal University approved on February 7<sup>th</sup>, 2016.

#### **4b- Program structure:**



**MD Program Credit points (CP) structure:**

**Total needed credit points for getting MD degree 180 CP**

The program consists of **First part 30 CP, Thesis 50 CP, and Second part 100 CP**

1. **The first part of the program:** 30 CP, its duration (15 weeks) for one academic semester. The first part comprises the following:
  - a. A course in Advanced Research Methodology and Statistics planned and held in the Community Medicine Department of the Faculty of Medicine, Suez Canal University. This part includes 8 CP.
  - b. Two electives each one has 2 CP. The students should select one elective which has not been selected in the Master Degree.
  - c. The specialized courses in Surgical Anatomy, planned and held in the anatomy Department. It includes 9 CP.
  - d. The specialized courses in Surgical Pathology, planned and held in the Pathology Department. It includes 9 CP.
- 2- **MD thesis:** 50 CP, no scores for thesis. The candidate has the right to register his/her thesis protocol after 6 months from the degree registration. The first time for thesis defense after 2 years from the date of the faculty council approval on the thesis protocol.
- 3- **The second part of the program:** 100 CP, its duration (75 weeks ) for 5 consecutive academic semesters. The second part comprises the specialized courses in Cardiothoracic Surgery, planned and held in the Cardiothoracic Surgery Department. This part lasts for 2 years ending by written and practical exams.

**No. of credit Points:** the MD program is 180 credit Point system.

Every credit point include 25 working hour (30% = 7 hours for face to face learning activities, and 70% =18 hours for self-learning activities).



## 5. Program Courses

### 5.1- Level/Year of Program: First part of MD (30 CP)

\*Student should select one course of the following as an elective course:

Courses			Assessment				
Code No.	Course Title	No. of Credit points	Written Exam			Oral exam	Practical or clinical Exam
			No of Papers	Duration	Marks		
BR	Research methodology and biostatistics	8	1	3 hours	160		
CSCS51	Surgical Anatomy	9	1	3 hours	135	45	
CSCS52	Surgical Pathology	9	1	3 hours	135	45	
E	Two Elective courses*	2+2	1+1	1 hour+1 hour	40+40		
<b>Total</b>		<b>30 credit points</b>			<b>600 marks**</b>		

Two elective courses each one has 2 CP. The students should select two elective which has not been selected before in the Master Degree.

- E01 Evidence Based medicine (Community Department)
- E02 Scientific Writing (Medical Education Department)
- E03 Quality in Medical Education (Medical Education Department)
- E04 Infection Control (Microbiology Department)
- E05 Critical Appraisal (Community Department)
- E06 Communication Skills (Medical Education Department)

\*\*every credit point equal 20 marks

### 5.2- Level/Year of Program: Second part of MD program (100 CP)

Courses			Assessment					
Code No.	Course Title	No. of Credit points	Written Exam			Oral exam	Practical or clinical Exam	Continues assessment *(Portfolio)
			No of papers	Duration	Marks			
CSCS 53	Advanced Course in CTS	60	3	3 hours 3 hours 1:30 hrs	225+ 225+ 90	180	360	540
	Practical training in CTS	30						
	***Scientific activities	10 (not included in the total)						



		marks)							
<b>Total</b>		<b>100 credit points</b>			<b>1800**marks</b>				

\*Portfolio its scores distributed in the different parts of the portfolio and its total score included among total mark of second part

\*\*every credit point equal 20 marks

\*\*\*Scientific activities are not included in the total marks

**5.3 Thesis:** A faculty senior & junior supervisor from the staff members are nominated by the department council to prepare a proposal of the thesis protocol after the selection of a subject that is complementary to the research plans of the department. Data collection, methodologies, study question, time table, ethical considerations and budget are formulated by the candidate under guidance of his supervisors into a research project. The research protocol is then peer reviewed by two different staff members nominated by the head of the department who share their ideas and comments with the supervisors to reach to the final form. The research protocol is discussed then openly in one of the department councils to be approved and diverted to the faculty research committee where it is subjected to a critical appraisal to meet the research basic standards set by the committee. The final approvals of the research protocol are then issued by the committee of post graduate studies, the Faculty and University Council to be registered.

## **6- Program Admission Requirements**

- The program accepts candidates with Masters in CTS with a grade of GOOD at least.
- Registration for the program opens 2 times/year, according to the internal bylaws for postgraduate studies of the Faculty of Medicine, Suez Canal University.

## **7- Student Assessment Methods**

- 7.1 Written (MEQ)** to assess the cognitive domain.
- 7.2 MCQs** to assess the cognitive domain
- 7.3 Oral Viva Cards** to assess higher cognitive and attitude domains.
- 7.4 Observations** to assess practical and presentation skills.
- 7.5 Portfolio** to assess the cognitive, psychomotor and the affective domains.

## **8- Weighting of Assessments**

Type of exam	
First part (30 credit points= 600 mark)	
• Written exam	510
• Oral exam	90



- **Total** **600**

**Second part (100 credit points including 10 credit points not included in the total marks =1800 mark)**

- Oral exam 180
- Practical exam 540
- Written exam 540
- Portfolio 540

**Total** **1800**

### **9- Regulations for Progression and Program Completion**

- The regulations for program completion follow the general regulations for the Faculty of Medicine, Suez Canal University for MD approved by the Supreme Council of Universities. The program is considered complete with the accomplishment of 2 summative assessment (for the first and the second parts) and the defense of a thesis developed and submitted for the purpose of acquiring the degree.
- **First part**
- Passing level 60% of total marks of the exam and at least 50% passing level of the total written exam marks
- **Second part**
- Passing level 60% of total marks of the exam
- Passing level 60% total of practical and oral exam
- **Thesis/Assay**
- Passing discussion is required for MD degree

### **10- Evaluation of Program Intended Learning Outcomes (ILOs)**

Evaluator	Tool	Sample
1- Postgraduate students	Needs assessment questionnaires	Random sample of participants
2- Alumni (no graduates)	NA	NA
3- Stakeholders	Self-administered questionnaires DELPHI Focus groups	According to the method
4-External Evaluator(s) (External Examiner(s))	External audit of the program specifications	
5- Other		

*Head of Department*  
*Prof. Hany El-Domiatty*  
*Date: October 2019*