



**Department of Anesthesia &
Surgical Intensive care**

**DEGREE: Doctorate (MD) in Anesthesia and Surgical
intensive care (AIMD)
Programme Specification
2012/2015**

Date: 3 /2012

A-Basic Information

1- Programme Title: Doctorate (MD) in Anesthesia and Surgical intensive care.

2- Final Award: MD degree in Anesthesia and Surgical intensive care.

3- Programme type: Single Double Multiple

4-Responsible Departments: 1- Anesthesia and Surgical intensive care department.

2-Public health department.

3-Pharmacology department.

5- programme duration: 3 academic years.

6- Number Programme courses: 6 courses

{Pre-requisite courses in :1-statistics & methodology for MD students (MS), 2-Computer and internet application in medicine (CA)}, 3- Applied physiology and clinical measurements (AIMD 01) 4-Applied Pharmacology (AIMD 02) 5- Anesthesia and surgical ICU(AIMD 03) 6-Thesis (MDTH).

7-Coordinator: Prof.Dr./ Zainab Mostafa Attia.

8-External evaluators: Prof. Dr. Walaa El-kharbotly. Mansoura University, Faculty of Medicine, Anesthesia and surgical ICU department.

9-Last date of programme specifications approval: 2012

10- Programme management team:

Prof.Dr./ Zainab Hamed Swan.

Prof.Dr./ Tarek Gaafar.

Prof.Dr./ Mostafa Magdy.

B-Professional Information:

1-Programme aims:

The aim of this programme is to produce a knowledgeable and skillful anesthesiologist who is competent to anaesthetize all categories of patients from ASA-I to V with medical problems for every type of elective and emergency surgery, able to diagnose and treat acute and chronic pain conditions, competent to manage critically ill patients in emergency and ICU requiring routine to advanced monitoring, mechanical ventilation and other interventions, aware of the recent advances and developments in medical sciences as related to anesthesia, analgesia and critical care and is competent to teach acquired skills to medical and paramedical professionals.

2- Intended Learning Outcomes (ILOs):

By the end of the MD programme the candidate will be able to:

A- Knowledge and Understanding

KU1 Define the applied physiology of different body systems and the clinical measurements related to anesthesia and intensive care medicine.

KU2 Summarize Clinical Pharmacology for drugs used in anesthesia and intensive care medicine.

KU3. Recognize methods of statistics and use of computer in medical science.

KU4. Summarize pre and post operative care in case of medical disorders.

KU5. Explain general basics for anesthesia practice.

KU6. Explain anesthesia for pediatric and neonate surgery.

KU7. Recognize all types of anesthesia for general surgery, plastic, vascular, and laparoscopic surgeries.

KU8. Demonstrate a thorough understanding of the complexity of the breadth of neurosurgery/neuroradiology and neuro-critical care.

KU9. Outline a structured approach for dealing with the complexity of the breadth of cardiac, thoracic surgeries and interventional cardiology.

KU10. Summarize research methodology and ethics.

KU11. Outline an evidence based approach to safe anesthetic management of day case procedures for patients with a range of significant co-morbidities and patient selection protocols.

KU12. Demonstrate anesthetic techniques used for more complex ENT, maxillo-facial and dental surgery.

KU13. Recall / describe an evidence based approach to the management of complex ASA I-IV patients for elective and emergency major urological and gynecological surgery.

KU14. Describe in depth anesthetic management for liver and renal transplantation and for patient with transplanted liver or kidney.

KU15. Discuss current advances and controversies in obstetrics.

KU16. Recommend an evidence based approach to the management of complex ASA I-IV patients for elective and emergency major orthopedic [including spine] surgery.

KU17. Specify in depth the responsibilities associated with the role of trauma team leader.

KU18. Develop a detailed knowledge of the majority of conditions presenting to ICU, and a wide experience of ICM (intensive care management) in varied situations.

KU19. Demonstrate a comprehensive knowledge of Pain Medicine service delivery.

KU20. Demonstrate the different techniques of regional and local blockade.

KU21. Understand the national code of ethics issued by the Egyptian Medical Syndicate.

KU22. Outlines the effects of his professional practices on the community.

KU23. Outlines the infection control guidelines, in intensive care units & operative rooms.

KU24. Outline in-depth, the peri-procedure [diagnostic or therapeutic, elective or emergency] anesthetic/sedation needs for complex ASA 1-4 patients that may take place outside the operating theatre, including remote sites including but not exclusively in the following settings: The Radiology suites, Radiotherapy and ECT

B: Intellectual Skills

IS1. Internalize why effective decision making and organization skills are required by anesthetists to ensure clinical sessions are delivered safely, efficiently and effectively to the benefit of both patients and the organization; this implies an ability to recognize the importance of providing overall leadership of the multi-disciplinary team when necessary.

IS2. Observe a safe behavior in prescribing practice to all members of the multi-disciplinary team.

IS3. Adopt strategies to reduce risk [e.g. the use of the WHO Safe Surgery Checklist] and a willingness to participate in improvement strategies [e.g. critical incident reporting]; acts to rectify error immediately if it is made.

IS4. Analyze, interpret, objectively evaluate and prioritize information, recognizing its limitations.

IS5. Prioritize the problems in critical cases.

IS6. Use personal judgment for analytical and critical problem solving and seek out information.

IS7. Design an initial course of management for stabilization of patients with serious illnesses.

IS8. Recognize and cope with uncertainty that is unavoidable in the practice of medicine by accepting and reacting to uncertain situation.

IS9. Perform and write a scientific paper

IS10. Analyze problems in his specialty and the creative ability to solve facing problems.

C- Professional/practical skills

PS1. Manage the perioperative airway and anesthetic care for a wide variety of patients with complex airway problems and for complex ENT, maxillo-facial and dental surgical cases independently

PS2. Plan for safe perioperative anesthetic care of patients having combined surgical / radiological procedures, including those performed in isolated sites using either regional or general anesthesia

PS3. Write *standard operating procedure*, (SOPs) and checklists

PS4. Establish invasive monitoring of arterial and filling blood pressure
And perform central venous access insertion.

PS5. Use a comprehensive number of neural blockade procedures and imaging techniques for pain management including acute and chronic pain.

PS6. Demonstrate competency in cardiopulmonary resuscitation and advanced life-support.

PS7. Plan comprehensive safe anesthetic care to all ASA 1-4 adult patients and children for all types of elective and emergency surgery either under general anesthesia or monitored anesthesia care

PS8. Utilize international standards algorithms for resuscitation of the patient adopted in the basic and advanced life support, advanced trauma life support , pediatric life support, airway and major incident management

PS9. Apply scientific evidence medicine on patient in intensive care and anesthesia

PS10. Administer competently and safely the required types of anesthesia in all age groups for both elective and emergency situations.

D- General & Transferable skills

GS1. Develop & make database search in the library & internet.

GS2. Work within a multi-disciplinary team, demonstrates the necessary communication, teamwork, leadership, professional and practical [anesthetic] skills needed to manage patients on all elective and emergency surgical lists, safely and effectively.

GS3. Learn and evaluate others.

GS4. Use information, and communication technology effectively.

GS5. Solve problems related to work management and among colleagues.

GS6. Practice the different types of effective communication.

GS7. Evaluate him/her-self and assess the personal educational needs.

GS8. Use different resources to gain knowledge and information.

GS9. Develop rules and indicators to evaluate the performance of others.

GS10. Manage seminars in addition to the effective time management.

GS11. Learn by self and in a continuous manner.

GS12. Adopt an empathic and holistic approach to the patients and their problems management decisions.

GS13. Understand and respect the different cultural beliefs and values in the community they serve.

3. Academic standards:

3a. Generic standards of postgraduate programmes, prepared by National Authority of Quality Assurance and Accreditation of Education (NAQAAE).
المعايير القياسية العامة لبرامج الدراسات العليا التي أعدتها الهيئة القومية لضمان جودة التعليم والاعتماد
فبراير (2009)

3b. External reference (Benchmark) (attached): Doctoate (MD) degree in Anesthesia and Surgical intensive care Programme of the Royal College of Anaesthetists (RCoA)

3c. Matrices:

- 1- Comparison between the intended learning outcomes (ILOs) of the Faculty of Medicine Zagazig university MD in Anesthesia and Surgical intensive care programme and that of the Generic Academic standards of postgraduate programme prepared by National Authority of Quality Assurance and Accreditation of Education.

Generic Academic standards of MD programme المعايير العامة لبرامج الدراسات العليا (برامج الدكتوراة)	Comparable ILOs in the MD in Anesthesia and Surgical intensive care programme	Remarks
1- المعرفة و الفهم أ- النظريات و الأساسيات والحديث من المعارف في مجال التخصص وكذا في المجالات ذات العلاقة ب- المبادئ الأخلاقية و القانونية للممارسة المهنية في	KU1 to KU24	100 % is fulfilled

<p>مجال التخصص. ت- مبادئ و أساسيات الجودة في الممارسات المهنية في مجال التخصص. ث- أساسيات و أخلاقيات البحث العلمي وأدواته المختلفة ج- المعارف المتعلقة بآثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها</p>		
<p>المهارات الذهنية أ- تحليل و تقييم المعلومات في مجال التخصص والقياس عليها والإسباط منها. ب- حل المشاكل المتخصصة استنادا على المعطيات المتاحة ت- الربط بين المعارف المختلفة لحل المشاكل المهنية. ث- اجراء دراسة بحثية تضيف إلى المعارف. ج- تقييم المخاطر في الممارسات المهنية في مجال التخصص. ح- التخطيط لتطوير الأداء في مجال التخصص. خ- اتخاذ القرارات المهنية في سياقات مهنية متنوعة. د- صياغة أوراق علمية ذ- الإبتكار والإبداع. ر- الحوار والنقاش المبني على البراهين والأدلة.</p>	IS1- IS10	100% is fulfilled
<p>المهارات المهنية أ - إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص. ب -كتابة و تقييم التقارير المهنية. ت -تقييم وتطوير الطرق والأدوات القائمة في مجال التخصص ج-إستخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية. ح- التخطيط لتطور الممارسة المهنية وتنمية أداء الآخرين.</p>	PS1 to PS9	100% is fulfilled
<p>المهارات العامة و المتنقلة أ -التواصل الفعال بأنواعه المختلفة ب -استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية. ت -التقييم الذاتي والمستمر ث -استخدام المصادر المختلفة للحصول علي</p>	GS1 to GS14	100% is fulfilled

<p>المعلومات والمعارف.</p> <p>ج-تعليم الآخرين وتقييم أداءهم.</p> <p>ح-العمل في فريق و قيادة فرق في سياقات مهنية مختلفة.</p> <p>خ-إدارة اللقاءات العلمية والوقت بكفاءة.</p> <p>د-التعلم الذاتي و المستمر.</p>		
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2- Comparison between the ILOs of the MD programme in Anesthesia and Surgical intensive care, Faculty of medicine-Zagazig university and that of Anesthesia and Surgical intensive care MD Programme of the Royal College of Anaesthetists (RCoA)

ILOs in MD of Anesthesia and Surgical intensive care Programme of the Royal College of Anaesthetists (RCoA)	ILOs in MD of Anesthesia and Surgical intensive care programme Faculty of medicine, Zagazig University	Approximate achievable ILOs
<p>Knowledge & Understanding:</p> <p>1- To have a thorough understanding of the complexity of the breadth of neurosurgery/neuroradiology performed and provide clinical leadership to any patient requiring neuro-critical care.</p> <p>2-To be capable of undertaking the perioperative anaesthetic care for a wide variety of complex cardiothoracic surgical cases and cardiological procedures.</p> <p>3-Gain mastery in the delivery of safe and effective peri-operative airway and anaesthetic care to patients with complex airway problems involving all types of surgery.</p> <p>4-Gain mastery in the delivery of safe and effective perioperative anaesthetic care to patients undergoing complex/major ENT, maxillo-facial and dental surgery.</p> <p>5-Gain mastery in the delivery of safe and effective perioperative anaesthetic care to patients undergoing complex intra-abdominal surgical procedures.</p> <p>6-Gain mastery in the delivery of safe and</p>	<p>KU8</p> <p>KU9</p> <p>KU9, KU10</p> <p>KU4,KU5,KU7,KU8,KU12</p> <p>KU5,KU7,KU13,KU14.</p>	<p>80 % is fulfilled</p>

<p>effective peri-operative anaesthetic care to patients undergoing complex hepatobiliary surgical procedures.</p>	KU14	
<p>7-Gain mastery in the delivery of safe and effective perioperative anaesthetic care to patients undergoing complex vascular procedures [including intra-thoracic], both elective and emergency and in-theatre and in imaging suites.</p>	KU7,KU9	
<p>8-Gain mastery in all aspects of the perioperative anaesthetic management of all patients presenting for day surgery.</p>	KU11	
<p>9-Gain mastery in the delivery of safe and effective peri-procedural conscious sedation to patients of all ASA grades [frequently with serious co-morbidities] undergoing a wide variety of simple to complex procedures often in remote areas.</p>	KU24	
<p>10-Gain mastery in the delivery of safe and effective perioperative anaesthetic care to patients undergoing complex orthopaedic procedures</p>	KU16	
<p>11-Gain mastery in a wide range of regional anaesthetic techniques using a variety of methods to assist in the identification and safe placement of needles and catheters, including in-depth understanding of the place and use of ultrasound.</p>	KU20	
<p>12-Gain mastery in leading the delivery of safe and effective multi-disciplinary care to multiply-injured patients as Trauma Team Leader</p>	KU17	
<p>13-Have a detailed knowledge of the majority of conditions presenting to ICU.</p>	KU18	
<p>14-Have a wide experience of ICM in varied situations, be able to manage initial resuscitation and stabilisation of any acutely ill patient, adult or child, prior to transfer to an appropriate specialist centre,be able to operate unsupervised and take on a management and leadership role in an ICU.</p>	KU4,KU18	
<p>15-Gain mastery in the delivery of safe and effective perioperative anaesthetic care to patients undergoing complex obstetric procedures.</p>	KU15	
<p>16-To be capable of undertaking the perioperative anaesthetic care for a wide variety of complex paediatric [including neonates] procedures independently.</p>	KU6	
<p>17-Being aware of the treatment options available to provide effective management for patients with acute, chronic and cancer pain.</p>	KU19	

<p>18-Gain mastery in the delivery of safe and effective peri-operative anaesthetic care to patients undergoing complex burns and plastics procedures, both elective and emergency.</p>	<p>KU7</p>	
<p>Intellectual Skills:</p> <ol style="list-style-type: none"> 1. Observe a safe behavior in prescribing practice to all members of the multi-disciplinary team 2. Clinical problem solving skills 3. Analysis and evaluation skills. 4. Understanding evidence based medicine. 5. Analyze, interpret, objectively evaluate and prioritize information, recognizing its limitations. 6. Adopt strategies to reduce risk [e.g. the use of the WHO Safe Surgery Checklist] and a willingness to participate in improvement strategies [e.g. critical incident reporting]; acts to rectify error immediately if it is made. 	<p>IS1,IS2 IS7,IS10 IS5,IS6 IS8,IS9 IS4 IS3</p>	<p>80% is fulfilled</p>
<p>General & Transferable skills</p> <ol style="list-style-type: none"> 1-Commits to the importance of being a good team member, 2. provide high quality clinical care in all clinical situations regularly 3. Develops a personal learning network of individuals and organisations including; attending specialist educational meetings and reads specialist journals in special interest areas of practice 4. able to receive feedback appropriately for the purpose of self-improvement and provides feedback to others when asked 5. Communication with staff, patients and relatives. 6. Make effective oral and written presentations of work. 	<p>GS2 GS5,GS12 GS1,GS4,GS8,GS10 GS1,GS3,GS7,GS11 GS6,GS13 GS9</p>	<p>80% is fulfilled</p>
<p>Professional/practical skills:</p> <ol style="list-style-type: none"> 1. Direct observation of trainee during list - focusing on their capacity to make accurate observations of clinical signs and physiological data leading to appropriate characterization of the patient's status. 2. Strategies for maintaining the patient's safety 3. Pre-operative assessment, investigation, 	<p>PS 2, PS3 PS 10</p>	<p>80% is fulfilled</p>

evaluation of patient and planning of anaesthesia 4. Focus on safety during management of induction and emergence. Promptness and suitability and adequacy of response to problems during anaesthesia and in recovery 5. Apply scientific evidence medicine on patient in intensive care and anesthesia. 6. Demonstrate competency in cardiopulmonary resuscitation and advanced life-support.	PS2 PS1,PS5,PS7 PS8,PS9 PS4,PS6	
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3- - Comparison between the ILOs of the MD programme in Anesthesia and Surgical intensive care and that of the 6 courses (Computer, Statistics, Physiology & clinical measurements , Pharmacology, Anesthesia and Surgical intensive care 12 and Anesthesia and Surgical intensive care 13).

Programme of MD in Anesthesia and Surgical intensive care	MDTH	Anest AIMD 03	Phys & cl. meas AIM D 01	Phar AIMD 02	CA	MS
KU1- KU 24	KU21	From KU1 to KU24	KU1 KU5	KU 2	KU3	KU3
IS1 - IS10	IS9	From IS1 to IS10	IS3 IS7	IS24	IS4, IS6	IS4, IS6
PS1- PS10	PS9	From PS1 to PS10	PS4	PS3	PS9	PS9
GS1- GS13	GS8	From GS1 to GS13	GS4 GS8, GS11	GS8, GS11	GS1, GS8	GS1, GS8

4- Programme structure:

Course	units	Teaching hours	weeks	Academic year
Computer (CA)	11	48	24	1 st part

Statistics (MS)	9	24	12	1 st part
Pharmacology (AIMD 02)	12	56	12	1 st part
Physiology & measure. (AIMD 01)	15	48	12	1 st part
Anesth (AIMD 03)	18	5539	156	2 nd part
Thesis (MDTH)	Thesis	216 (supervision)	36	2 nd part
Total		5923	252	

N.B. MD candidates in addition to lectures hours (6 hours / week), attend rotation schedule for subspecialty 4 days / week.(8 hours / day) included in caring of regular continuing clinical education sessions. Also there are journal clubs, departmental meetings and research seminars. Teaching for units is overlapping in the same weeks.

5. Programme courses 5.

Code No.	Units	Title	No of hours			No of weeks
			Theoretical & seminars	Practical	total	
Computer CA	1	How to locate the proper source for health and medical information	3	1	4	2
	2	How to decode URLs and identify file types	2	1	3	2
	3	How to formulate an effective search statements	3	2	5	2
	4	How to evaluate the internet information	3	2	5	2
	5	Citing internet documents and avoiding plagiarism	3	2	5	2
	6	Web 2.0 and social / collaborative internet tools	3	2	5	2
	7	Using of Internet tools in Evidence-Based Medicine	3	2	5	4
	8	Health on the net code of ethics	2		2	2
	9	Using of Free online Journal Databases	2	2	4	2
	10	Scope , uses, application of Pub-Med Medline database	3	2	5	2

	11	Medical Wiki, Blogs, groups, multimedia, and Health 2.0 tools	3	2	5	2
Statistics MS	1	Introduction to medical statistics	2	1	3	2
	2	Types of research methodology	2	2	4	2
	3	Population sampling	2	1	3	1
	4	Types of data, presentation	2	1	3	1
	5	Summarization of data	2	1	3	1
	6	Normal distribution curve	1		1	1
	7	Tests of significance	2	1	3	2
	8	Types of errors, bias	1		1	1
	9	Correlation, regression	2	1	3	1
		Total	46	26	72	36

Code No.	Units	Title	No of hours			No of weeks
			Theoretical & seminars	Practical	total	
Physiology & clinical measurements AIMD 01	1	GENERAL PHYSIOLOGY	1	-	1	1
	2	BODY FLUIDS, THE FUNCTIONS AND CONSTITUENTS	3	-	3	1
	3	HAEMATOLOGY AND IMMUNOLOGY	3	-	3	1
	4	MUSCLE PHYSIOLOGY	1	-	1	1
	5	HEART/CIRCULATION PHYSIOLOGY	6	-	6	2
	6	PHYSIOLOGY OF RENAL TRACT	3	-	3	1
	7	PHYSIOLOGY OF RESPIRATION	6	-	6	2
	8	PHYSIOLOGY OF NERVOUS SYSTEM	4	-	4	1
	9	LIVER PHYSIOLOGY	2	-	2	1
	10	GASTROINTESTINAL PHYSIOLOGY	2	-	2	1
	11	PHYSIOLOGY OF METABOLISM AND BODY TEMPERATURE	2	-	2	1
	12	PHYSIOLOGY OF ENDOCRINOLOGY	3	-	3	1

	13	PHYSIOLOGY OF OBSTETRICS AND PAEDIATRICS	3	-	3	1
	14	PHYSIOLOGY OF GERIATRICS	1	-	1	1
	15	CLINICAL MEASUREMENT	8	-	8	2
Total			48	-	48	18
Pharmacology AIMD 02	1	GENERAL PHARMACOLOGY	12	-	12	3
	2	NEUROMUSCULAR	3	-	3	1
	3	CENTRAL NERVOUS SYSTEM	13		13	3
	4	THERAPEUTIC GASES	1	-	1	1
	5	LOCAL ANESTHETICS	1	-	1	1
	6	CARDIOVASCULAR SYSTEM and BLOOD	11	-	11	3
	7	RESPIRATORY SYSTEM	1	-	1	1
	8	RENAL SYSTEM	2	-	2	1
	9	GASTROINTESTINAL SYSTEM	2	-	2	1
	10	ENDOCINE	5	-	5	1
	11	ANTIMICROBIAL THERAPY	2	-	2	1
	12	EYE	1	-	1	1
	13	TOXICOLOGY	2	-	2	1
Total			56	-	56	19

Code No.	Unit	Title	No of hours			No of weeks
			Theoretical & seminars	Practical	total	
Anesth. AIMD 03	1	GENERAL BASICS FOR ANESTHESIA PRACTICE	40	64	104	3
	2	ANESTHESIA FOR PEDIATRIC SURGERY	20	136	156	5
	3	ANESTHESIA FOR GENERAL SURGERY	20	416	436	14
	4	ANESTHESIA FOR ENT	10	272	282	9
	5	ANESTHESIA FOR DENTAL AND MAXILLOFACIAL SURGERY	6	136	142	4
	6	ANESTHESIA FOR NEUROSURGERY	18	416	434	14

	7	ANESTHESIA FOR OBSTETRIC AND GYNECOLOGY	18	416	434	14
	8	ANESTHESIA FOR ORTHOPEDIC SURGERY	12	272	284	9
	9	ANESTHESIA FOR OPHTHALMIC SURGERY	6	272	278	8
	10	ANESTHESIA FOR CARDIOTHORACIC SURGERY	30	480	510	15
	11	ANESTHESIA FOR RENAL AND GENITOURINARY SYSTEM	12	272	284	9
	12	ANESTHESIA FOR DAY CASE SURGERY	4	36	40	2
	13	ANESTHESIA FOR TRAUMA AND EMERGENCY	10	416	426	12
	14	GERIATRIC ANESTHESIA	4		4	
	15	ANESTHESIA AT REMOTE LOCATION	2		2	
	16	REGIONAL ANESTHESIA	12		12	1
	17	PAIN MANAGEMENT	18	272	290	9
	18	SURGICAL INTENSIVE CARE	40	1152	1192	24
		Special courses	8	43	51	4
Total			290	5249	5539	156 weeks
MDTH		RESEARCH in ANESTHESIA and SURGICAL INTENSIVE CARE			216	36 weeks

N.B. The courses are parallel to each other.

6- Programme admission requirements

Master degree in anesthesia and surgical ICU.

7- Regulations for progression and programme completion

At the end of 1st Academic Year

*- fulfillment of the of log book.

*- Pass examinations in the computer, statistics, applied pharmacology (AIMD 02) and physiology and clinical measurements (AIMD 01) courses.

3rd Academic Year

- *- fulfillment of the of log book.
- *- Pass examination in the course AIMD 03.
- *- Perform the MD thesis in anesthesia and surgical intensive care (MDTH):
fulfillment of the supervisors report every 3 months.
- *- perform a seminar about the thesis results.
- *- Acceptance of the MD thesis from judgment committee nominated by department council.

8- Evaluation of programme intended learning outcomes

Evaluator	Tool	Sample
1- Exams results	Results analysis Report	
2- Students	Questionnaires	All the students
3-Graduates achieving MD degree	Questionnaires – group discussion	10 at least
4-Stakeholders *- teaching staff. *- Regional medical institutes *- International medical institutes. *- other Governmental faculties *- Non governmental faculties	Interviews Internet contact Phone calls Questionnaires	10 at least
5-External Evaluator	Questionnaires	
6-Others (If Present)		

References :

VII-A) Essential Books:

- Anesthesia (2010) Miller RD, ed, 7th ed.
- Clinical Anesthesiology (2006), Morgan GE et al, ed, 4th ed
- Marino PL (2007)3rd ED.
- Problem oriented anesthesia (Yao & Artusio 2008.)
- Regional Anesthesia (M.Zenz,C.Panhans,H.Chr.Niesel,H.Kreuscher2008.)

VII-B) SUGGESTED MATERIALS:

1 - Up-to-date Web sites:

www. MD Linx Anesthesia.

www.Zu.edu.eg.

www.Ezzat moemen.com

2-Journals of anesthesia

- British Journal of Anaesthesiology.
- Journal of Intensive Care Medicine.
- Anaesthesia and Intensive Care.
- Anesthesia & Analgesia.
- Journal of Clinical Anesthesia.
- Journal of Local and Regional Anesthesia.
- Journal of Cardiothoracic and Vascular Anesthesia.
- Egyptian Journal of Anesthesia.
- Saudi Journal of Anesthesia.

Supports for Candidates and their Learning:

Candidates and their learning are supported in a number of ways:

- ✓ Printed copies of the programme and anesthesia and surgical intensive care courses (Candidates aware of the ILOs and requirement of the MD degree in anesthesia and surgical intensive care.
- ✓ Availability of University central library.
- ✓ Availability of the Faculty postgraduate library
- ✓ Availability of the Department Postgraduate library.
- ✓ Availability of the faculty digital library.
- ✓ Availability of the other educational resources included in every course.
- ✓ MD thesis Supervisors (three Staff members according to the research specialty for each candidate).

Methods used for improving the programme:

- ✓ Peer teaching observations and feedback to the programme management team and the coordinator (written reports at the end of the courses).
- ✓ Faculty appointed external examiners.
- ✓ Candidates evaluation of teaching (Questionnaires).

Committee with responsibility for monitoring and evaluating quality:

- ✓ Internal Evaluators:
 - 1- Prof. Dr. ADEL RIZK (Head of anesthesia and surgical intensive care Department).
 - 2- Member from Quality unit in the faculty.
- ✓ External Evaluator :
Prof. Dr. Walaa El-kharbotly. Mansoura University, Faculty of Medicine, Anesthesia and surgical ICU department.

Regulations of assessment by-laws of the MD degree postgraduate of the faculty of medicine:

Computer course (CA)

- 1- Attendance of at least 75% of the teaching courses.
- 2- Log book fulfilled and approved by the head of the department.

Tools	Mark	Percentage of the total mark
Written exam	80	80%
Oral and Practical exam	20	20 %
Total marks	100	

Statistics course (MS)

- 1- Attendance of at least 75% of the teaching courses.
- 2- Log book fulfilled and approved by the head of the department.

Tools	Mark	Percentage of the total mark
Written exam	100	100%
Total marks	100	

Physiology and clinical measurement course (AIMD 01)

- 1- Attendance of at least 75% of the teaching courses.
- 2- Log book fulfilled and approved by the head of the department.

Tools	Mark	Percentage of the total mark
Written exam	100	50%
Oral exam	100	50 %
Total marks	200	

Pharmacology course (AIMD 02)

- 1- Attendance of at least 75% of the teaching courses.
- 2- Log book fulfilled and approved by the head of the department.

Tools	Mark	Percentage of the total mark
Written exam	100	50%
Oral exam	100	50 %
Total marks	200	

Anesth (AIMD 03)

- 1- Pass examinations in the computer, statistics, applied pharmacology and physiology and clinical measurements courses. (at least 60% of total Mark).
- 2- Attendance of at least 75% of the teaching courses.
- 3- Log book fulfilled and approved by the head of the department.

Tools	Mark	Percentage of the total mark
Written exam	200	66.7%
Oral exam (include ECG and imaging exam)	50	16.7 %
Practical exam	50	16.7%
Total marks	300	

NB: Examinations are conducted twice yearly.

MDTH

- *- Preregistration seminar
- *- Registration of the thesis title.
- *- Perform the thesis within at least 24 months of registration.
- *- After finishing the thesis Candidate perform a seminar about the thesis results.
- *- progression reports are introduced by each supervisor (one every 3 months).
- *- MD thesis acceptance by the supervisors.
- *- MD thesis acceptance by the judgment committee in an advertised public session by three professors including one of the supervisors, one from the faculty and third from other faculty..
- *- Four copies of the thesis must be given to the postgraduate library.

Rules for awarding the MD Degree in anesthesia and surgical intensive care:

- * Candidates must pass the computer, statistics, physiology and pharmacology courses exams (at least 60%) as a prerequisite for the registration of **AIMD 03** course and MD thesis (MDTH) .
- * MD thesis must be accepted by the judgment committee.
- * Candidates must pass the final exam of course **AIMD 03** (at least 60%).