مقارنة ما يقدمه البرنامج من نتائج تعليمية مستهدفة مع المعايير المرجعية لبرنامج الدكتوراة في جراحة الأوعية الدموية

أ ـ المعرفة والفهم:

المقررات التى تحقق المعايير الأكاديمية للبرامج	ILOs مخرجات التعلم المستهدفة	(ARS) Benchmark المعايير الأكاديمية لجامعات انجلترا	(NARS) المعايير القومية الأكاديمية القياسية العامة لبرامج قطاع الدراسات العليا (درجة الدكتوراه فى جراحة الاوعيه الدمويه)
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques .	A1,2,3,4,5,6,7,8,9,10,11,12	-The medical problems in our society are the main reason which influence the training of our vascular candidates.. -In vascular surgery the predominant diseases is atherosclerosis with increasing obesity and Diabetes Milletus , those patients requires a lot of care especially for their infections at least and the reduced blood flow to the lower limb as a result of atherosclerosis. This revascularization can be performed either using a catheter or surgery. -Chronic renal failure is a major problem in our locality which requires large number of medical personal with a high degree of knowledge to manage this problem. -Trainees in surgery should be allocated to approved posts commensurate with their level of training and appropriate to the educational opportunities available in that post (particular consideration should be given to the needs of less than fulltime trainees). Due consideration should be given to individual training requirements to minimise competition for educational opportunities.	1. The theories, concepts and modern knowledge in the field of specialization and other related field
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery	A1,2,3,4,5,6,7,8,9,10,11,12 B1,2,3,4,5, D1,2,3,4,5,6,7	-Demonstrates understanding of the basic principles of audit, clinical risk management & evidence based practice -Understanding of basic research principles, methodology & ethics, with a	2. The basics, methodologies, ethics of scientific research and its versatile tools

-Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.		potential to contribute to research -Trainees in surgery should have the opportunity and study time to complete and present one audit project in every twelve months. (The requirements for audit vary for each surgical specialty. Please refer to the designated specialty for details.) -Trainees in surgery should have at least 2 hours of facilitated formal teaching each week (on average). (For example, locally provided teaching, regional meetings, annual specialty meetings, journal clubs and x-ray meetings). -Trainees in surgery should have easy access to educational facilities, including library and IT resources, for personal study, audit and research and their timetables should include an equivalent to half a day per week to allow for this.	
-Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	A1,2,3,5,7,9,10,11 D2,4,6,7	To understand the ethical and legal obligations of a surgeon To understand consent and ethical issues in patients certified DNAR (do not attempt resuscitation)	3. The moral and legal ethics of the professional practice in the area of specialization
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	A4,5 D5	-All trainees in Vascular Surgery should have the opportunity to attend a minimum of two consultant-supervised outpatient clinics per week and should see a mix of new and follow-up patients. -All trainees in Vascular Surgery should have the opportunity to attend a minimum of one consultant-supervised ward round per week.. -All trainees in Vascular Surgery should have the opportunity to attend a minimum of three supervised lists (open or endovascular) per week. The grade of supervisor and the mix of procedures	4. The concepts and principles of quality of the professional practice in the area of specialization

		should be consistent with the level of training as defined by the Vascular Surgery Curriculum	
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	A4,5,6	-Acquire experience in the management of a post surgical patient on the critical care, high dependency and post- operative wards. -Gain experience in the evaluation and management of a patient undergoing vascular surgery.	5. The knowledge on the effects of professional practice on the environment and ways of development and maintenance of the environment

ب ـ القدرات الذهنية :

المقررات التي تحقق المعايير الأكاديمية للبرامج	مخرجات التعلم المستهدفة ILOs	(ARS) Benchmark المعايير الأكاديمية لجامعة	(NARS) المعايير القومية الأكاديمية القياسية العامة لبرامج قطاع الدراسات العليا
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	B1-5	-Clinical assessment and management of the pre-operative, post-operative and critically ill patient -Analysis and interpretation of investigations, including specific diagnostic tests. -Critical care management including recognition, evaluation and treatment of haemodynamic and ventilatory abnormalities. -Familiarity with the management of multi-organ failure -The management of vascular emergency and trauma (ATLS)	1) Analyze and evaluate of information in the field of specialization and make full use of such information to solve problems
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular	B1-5 D2,5	-Capacity to think beyond the obvious, with analytical and flexible mind -Capacity to bring a range of approaches to problem solving -Clinical assessment and management of the pre-operative, post-operative and critically ill patient	2) Solve specific problems on the basis of limited and contradictory information

techniques.		-Analysis and interpretation of investigations, including specific diagnostic tests. -Critical care management including recognition, evaluation and treatment of haemodynamic and ventilatory abnormalities. -Familiarity with the management of multi-organ failure	
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	B4,5 D5,6	-Demonstrates understanding of the basic principles of audit, clinical risk management & evidencebased practice -Understanding of basic research principles, methodology & ethics, with a potential to contribute to research -Evidence of active participation in audit -Evidence of contributing to teaching & learning of others -Academic surgery provides an exciting and challenging career for candidates in addition to completing clinical training in general vascular surgery.	3) Carry out a research studies to add new information to the knowledge
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	B4,5 D5,6	-Demonstrates understanding of the basic principles of audit, clinical risk management & evidencebased practice -Understanding of basic research principles, methodology & ethics, with a potential to contribute to research -Evidence of active participation in audit -Evidence of contributing to teaching & learning of others -Academic surgery provides an exciting and challenging career for candidates in addition to completing clinical training in general Vascular surgery.	4) Write scientific papers
-Applied Anatomy related	A6	-To manage patient care in	5) Assess and analyze risks in

to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	B4,5	the peri-operative period. -To assess and manage preoperative risk. -To take part in the conduct of safe surgery in the operating theatre environment. -To assess and manage bleeding including the use of blood products. -To care for the patient in the post-operative period including the assessment of common complications. -To assess, plan and manage post-operative fluid balance -To assess and plan perioperative nutritional management.	the field of specialization
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	C1-6	Professional behaviour and leadership skills o To provide good clinical care o To be a good communicator o To teach and to train o To keep up to date and know how to analyse data o To understand and manage people and resources within the health environment o To promote good Health o To understand the ethical and legal obligations of a surgeon	6) Plan to improve performance in the field of specialization
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	C1-6 D2	-Capacity to monitor and anticipate situations that may change rapidly -Demonstrates effective judgement and decision-making skills -The objective of the training programme is to produce trained Vascular surgeons, who will have the clinical knowledge, the surgical expertise and the professional skills necessary for consultant practice.	7) Make good decisions in different professional aspects
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery	C1-6	-To assess the surgical patient -To elicit a history that is relevant, concise, accurate and appropriate to the patient's problem -To produce timely, complete and legible clinical records.	8) Have innovation/creativity

-Venous and lymphatic surgery -Advanced endovascular techniques.		-To assess the patient adequately prior to operation and manage any preoperative problems appropriately. -To propose and initiate surgical or non-surgical management as appropriate. -To take informed consent for straightforward cases.	
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	C1-6	-Candidates should be up to date and fit to practise safely -Preparation of the surgeon for surgery •Effective and safe hand washing, gloving and gowning •Administration of local anaesthesia •Accurate and safe administration of local anaesthetic agent -Preparation of a patient for surgery •Creation of a sterile field •Antisepsis •Draping	9) Discuss and negotiate in high level of confidence based upon proofs and evidences

ج ـ المهارات العملية:

المقررات التى تحقق المعايير الأكاديمية للبرامج	مخرجات التعلم المستهدفة ILOs	(ARS) Benchmark المعايير الأكاديمية لجامعة	(NARS) المعايير القومية الأكاديمية القياسية العامة لبرامج قطاع الدراسات العليا
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	C1-6 D1,2	Professional behaviour and leadership skills o To provide good clinical care o To be a good communicator o To teach and to train o To keep up to date and know how to analyse data o To understand and manage people and	1) Apply modern and principle professional skills in the area of specialization

		resources within the health environment o To promote good Health	
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	C1-6	Candidates should be efficient in writing of operation and medical records	2) Write and evaluate technical reports
-Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	C1-6 D4,6	Ability to assess the patient and manage the patient, and propose surgical or non-surgical management.	3) Adopt assessment methods and tools existing in the area of specialization.
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	C1-6 D1,5	-To assess the surgical patient -To elicit a history that is relevant, concise, accurate and appropriate to the patient's problem -To produce timely, complete and legible clinical records. -To assess the patient adequately prior to operation and manage any preoperative problems appropriately. -To propose and initiate surgical or non-surgical management as appropriate. -To take informed consent for straightforward cases.	4) Use of the appropriate technological means to serve the professional practice.
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	C1-6 D2	Professional behaviour and leadership skills o To provide good clinical care o To be a good communicator o To teach and to train o To keep up to date and know how to analyse data o To understand and manage people and resources within the health environment o To promote good Health	5) Plan to improve the performance of the professional practice and development of the performance of others

د- مهارات الاتصال:

المقررات التى تحقق المعايير الأكاديمية للبرامج	مخرجات التعلم المستهدفة ILOs	(ARS) Benchmark المعايير الأكاديمية لجامعة	(NARS) المعايير القومية الأكاديمية القياسية العامة لبرامج قطاع الدراسات العليا
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	D1,3,4,5,6	-Vascular surgeons generally work closely with their colleagues in Cardiology, Respiratory Medicine, Oncological Medicine, Anaesthesia and Intensive Care. They also have close professional relationships with other non-medical staff such as perfusionists, intensive care staff and operating department personnel. -To have sufficient understanding of these conditions so as to know what and to whom to refer in a way that an insightful discussion may take place with colleagues whom will be involved in the definitive management of these conditions.	1) Communicate effectively in different aspects
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	D1,2,3,4	Professional behaviour and leadership skills o To provide good clinical care o To be a good communicator o To teach and to train o To keep up to date and know how to analyse data o To understand and manage people and resources within the health environment o To promote good Health	2) Demonstrate efficient IT capabilities in such a way that serves in the development of the professional practice
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	D1,2,4,5,6	-Takes responsibility for own actions -Demonstrates respect for the rights of all -Demonstrates awareness of ethical principles, safety, confidentiality & consent -Capacity to operate effectively under pressure & remain objective In highly emotive/pressurised	3) Manage the scientific meetings and manage time

		situations -Awareness of own limitations & when to ask for help	
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	D3,5,6	Learning & Development: • Shows realistic insight into Vascular surgery and the personal demands of a commitment to surgery • Demonstrates knowledge of training programme & commitment to own development • Shows critical & enquiring approach to knowledge acquisition, commitment to self-directed learning and a reflective/analytical approach to practice.	4) Adopt self-assessment and Adopt life-long learning
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	D3,4,5,6	Professional behaviour and leadership skills o To provide good clinical care o To be a good communicator o To teach and to train o To keep up to date and know how to analyse data o To understand and manage people and resources within the health environment o To promote good Health	5) Use different resources for information and knowledge
-Applied Anatomy related to heart & chest -Applied Pathology related to blood and lymphatic vessels -Basic vascular surgery -Arterial tree surgery -Venous and lymphatic surgery -Advanced endovascular techniques.	D3,4,5	-Capacity to manage time and prioritise workload, balance urgent & important demands, follow instructions -Understands importance & impact of information systems -Trainees must attend MDT and other Departmental meetings and ward rounds, prepare operating lists (and actually perform some surgery under appropriate supervision. They must manage all patients in a ward environment, preoperatively and post operatively. This includes recognising and	6) Collaborate effectively within multidisciplinary team and lead team works

		initiating the management of common complications and emergencies, over and above those already laid out in the generic curriculum.	

-The medical problems in our society are the main reason which influence the training of our vascular candidates,.
-In vascular surgery the predominant diseases is atherosclerosis with increasing obesity and Diabetes Milletus , those patients requires a lot of care especially for their infections at least and the reduced blood flow to the lower limb as a result of atherosclerosis. This revascularization can be performed either using a catheter or surgery.
-Chronic renal failure is a major problem in our locality which requires large number of medical personal with a high degree of knowledge to manage this problem.
-Demonstrates understanding of the basic principles of audit, clinical risk
management & evidence based practice
-Understanding of basic research principles, methodology & ethics, with a potential to contribute to research
-Trainees in surgery should have the opportunity and study time to complete and present one audit project in every twelve months. (The requirements for audit vary for each surgical specialty. Please refer to the designated specialty for details.)
-Trainees in surgery should have at least 2 hours of facilitated formal teaching each week (on average). (For example, locally provided teaching, regional meetings, annual specialty meetings, journal clubs and x-ray meetings).
-Trainees in surgery should have easy access to educational facilities, including library and IT resources, for personal study, audit and research and their timetables should include an equivalent to half a day per week to allow for this.
To understand the ethical and legal obligations of a surgeon
To understand consent and ethical issues in patients certified DNAR (do not attempt resuscitation)
-All trainees in Vascular Surgery should have the opportunity to attend a minimum of two consultant-supervised outpatient clinics per week and should see a mix of new and follow-up patients.
-All trainees in Vascular Surgery should have the opportunity to attend a minimum of one consultant-supervised ward round per week..
-All trainees in Vascular Surgery should have the opportunity to attend a minimum of three supervised lists (open or endovascular) per week. The grade of supervisor and the mix of procedures should be consistent with the level of training as defined by the Vascular Surgery Curriculum
-Acquire experience in the management of a post surgical patient on the critical care, high dependency and post- operative wards.
-Gain experience in the evaluation and
management of a patient undergoing vascular surgery.
-Clinical assessment and management of the pre-operative, post-operative and critically ill patient
-Analysis and interpretation of investigations, including specific diagnostic tests.
-Critical care management including recognition,
evaluation and treatment of haemodynamic and ventilatory abnormalities.
-Familiarity with the management of multi-organ
failure
-The management of vascular emergency and trauma (ATLS)
-Capacity to think beyond the obvious, with analytical and
flexible mind
-Capacity to bring a range of approaches to problem
solving
-Clinical assessment and management of the pre-operative, post-operative and critically ill patient
-Analysis and interpretation of investigations, including specific diagnostic tests.
-Critical care management including recognition,
evaluation and treatment of haemodynamic and ventilatory abnormalities.

-Familiarity with the management of multi-organ
failure
-Demonstrates understanding of the basic principles of audit, clinical risk
management & evidencebased practice
-Understanding of basic research principles, methodology & ethics, with a potential to contribute to research
-Evidence of active participation in audit
-Evidence of contributing to teaching & learning of others
-Academic surgery provides an exciting and challenging career for candidates in addition to completing clinical training in general vascular surgery.
-Demonstrates understanding of the basic principles of audit, clinical risk
management & evidencebased practice
-Understanding of basic research principles, methodology & ethics, with a potential to contribute to research
-Evidence of active participation in audit
-Evidence of contributing to teaching & learning of others
-Academic surgery provides an exciting and challenging career for candidates in addition to completing clinical training in general Vascular surgery.
-To manage patient care in the peri-operative period.
-To assess and manage preoperative risk.
-To take part in the conduct of safe surgery in the operating theatre environment.
-To assess and manage bleeding including the use of blood products.
-To care for the patient in the post-operative period including the assessment of common complications.
-To assess, plan and manage post-operative fluid balance
-To assess and plan perioperative nutritional management.
Professional behaviour and leadership skills
o To provide good clinical care
o To be a good communicator
o To teach and to train
o To keep up to date and know how to analyse data
o To understand and manage people and resources within the health environment
o To promote good Health
o To understand the ethical and legal obligations of a surgeon
-Capacity to monitor and anticipate situations that may change rapidly
-Demonstrates effective judgement and decision-making skills
-The objective of the training programme is to produce trained Vascular surgeons, who will have the clinical knowledge, the surgical expertise and the professional skills necessary for consultant practice.
-To assess the surgical patient
-To elicit a history that is relevant, concise, accurate and appropriate to the patient's problem
-To produce timely, complete and legible clinical records.
-To assess the patient adequately prior to operation and manage any preoperative
problems appropriately.
-To propose and initiate surgical or non-surgical management as appropriate
-To take informed consent for straightforward cases.
-Candidates should be up to date and fit to practise safely
-Preparation of the surgeon for surgery
*Effective and safe hand washing, gloving and gowning
*Administration of local anaesthesia
*Accurate and safe administration of local anaesthetic agent
-Preparation of a patient for surgery
*Creation of a sterile field
*Antisepsis

*Draping
-Trainees in surgery should be allocated to approved posts commensurate with their level of training and appropriate to the educational opportunities available in that post (particular consideration should be given to the needs of less than fulltime trainees). Due consideration should be given to individual training requirements to minimise competition for educational opportunities.
Professional behaviour and leadership skills
o To provide good clinical care
o To be a good communicator
o To teach and to train
o To keep up to date and know how to analyse data
o To understand and manage people and resources within the health environment
o To promote good Health
Candidates should be efficient in writing of operation and medical records

Ability to assess the patient and manage the patient, and propose surgical or non-surgical management.
-To assess the surgical patient
-To elicit a history that is relevant, concise, accurate and appropriate to the patient's problem
-To produce timely, complete and legible clinical records.
-To assess the patient adequately prior to operation and manage any preoperative problems appropriately.
-To propose and initiate surgical or non-surgical management as appropriate.
-To take informed consent for straightforward cases.
Professional behaviour and leadership skills
o To provide good clinical care
o To be a good communicator
o To teach and to train
o To keep up to date and know how to analyse data
o To understand and manage people and resources within the health environment
o To promote good Health
-Vascular surgeons generally work closely with their colleagues in Cardiology, Respiratory Medicine, Oncological Medicine, Anaesthesia and Intensive Care. They also have close professional relationships with other non-medical staff such as perfusionists, intensive care staff and operating department personnel.
-To have sufficient understanding of these conditions so as to know what and to whom to refer in a way that an insightful discussion may take place with colleagues whom will be involved in the definitive management of these conditions.
Professional behaviour and leadership skills
o To provide good clinical care
o To be a good communicator
o To teach and to train
o To keep up to date and know how to analyse data
o To understand and manage people and resources within the health environment
o To promote good Health
-Takes responsibility for own actions
-Demonstrates respect for the rights of all
-Demonstrates awareness of ethical principles, safety, confidentiality & consent
-Capacity to operate effectively under pressure & remain objective In highly emotive/pressurised situations
-Awareness of own limitations & when to ask for help
Learning & Development:

• Shows realistic insight into Vascular surgery and the personal demands of a commitment to surgery
• Demonstrates knowledge of training programme & commitment to own development
• Shows critical & enquiring approach to knowledge acquisition, commitment to self-directed learning and a reflective/analytical approach to practice.

Professional behaviour and leadership skills

o To provide good clinical care
o To be a good communicator
o To teach and to train
o To keep up to date and know how to analyse data
o To understand and manage people and resources within the health environment
o To promote good Health

-Capacity to manage time and prioritize workload, balance urgent & important demands, follow instructions
-Understands importance & impact of information systems
-Trainees must attend MDT and other Departmental meetings and ward rounds, prepare operating lists (and actually perform some surgery under appropriate supervision. They must manage all patients in a ward environment, preoperatively and post operatively. This includes recognising and initiating the management of common complications and emergencies, over and above those already laid out in the generic curriculum,

Aims	*ILOs*
1. To prepare our candidates to acquire knowledge, competencies, skills and applications in different branches of Vascular Surgery by teaching the basic medical science related to Vascular Surgery. 2. – To give an update theoretical idea in vascular and endovascular Surgery. 3. To recognize the epidemiology, racial and gender distribution of each vascular surgical disease as an essential prerequisite for the development of effective control programs. 4. To acquire the pathogenic potential, pathogenesis, clinical picture and complications of	Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills. On successful completion of the program, the candidate will be able to: A- 'Knowledge and Understanding a1-Explain the anatomical and pathological processes underlying common vascular diseases and conditions a2-Explain the anatomical basis of vascular conditions, diseases and interventions a3-Describe the embryological basis of common congenital vascular diseases and conditions a4-Correlate common surgical & vascular infections with the causative pathogens a5-Describe the presentations of common vascular diseases a6-Define the relevant investigations required to reach an accurate diagnosis a7-Explain the medical treatment of vascular patients, its indications, contraindications, side effects, and mode of administration a8- Describe conservative management of vascular conditions, its indications, contraindications, and modalities a9-Explain the principles of operative surgery & endovascular surgery a10-Describe the appropriate technique and steps of common vascular & endovascular procedures a11- Outline the principles of advanced and complex operations of vascular & endovascular procedures a12- Outline the importance of patient education in vascular surgery 2- Intellectual activities (B) The Postgraduate Degree provides opportunities for candidates to achieve and demonstrate the following intellectual qualities: b1- Classify vascular diseases and conditions b2 – Differentiate vascular diseases and conditions

Vascular Surgical problems. 5. To accept different options of management both for Urgent and Cold cases. 6. To acquire different presentations related to vascular problem that might happen in some specialties as: Orthopedics, Obstetrics & gynecology & how to manage it. 7. To accept basics of ethics, medicolegal aspects of health problems & malpractice.	from each other b3 - Select appropriate laboratory and radiological investigations for each vascular condition b4 - Interpret the results of laboratory and radiological investigations b5- Select the proper line of treatment b6- Demonstrates the ability to solve common vascular problems C- Professional/practical skills The Postgraduate Degree provides opportunities for candidates to demonstrate the following professional/practical skills: C1- Examine different vascular systems of the body, including the arterial, venous, lymphatics, and extremities as well as different swellings & malformations. c2- Detect manifestations of clinical abnormalities c3- Construct a plan of management for a given clinical situation c4- Independently perform common vascular & endovascular Surgical Procedures with adequate proficiency c5- prepare the patient as regards the postoperative management and complications c6-Prepare the patient for vascular & endovascular procedures c7- Consult the patient as regards the surgical & endovascular options and outcome c8- Assist with efficiency and recognize challenges and difficulties during major vascular & endovascular procedures D- Communication & Transferable skills The Postgraduate Degree provides the opportunity to demonstrate the following transferable skills: d1- Apply sound communication skills in interviewing patients and their relatives d2- Apply team working skills in working with peers d3- communicate and cooperate efficiently and professionally with paramedical personnel d4- Maintain honesty and integrity in all interactions with lecturers, seniors, colleagues, patients and administrative task. d5- Be responsible towards oneself and others in the workplace and in the community at large d6- Maintain a professional image concerning behavior, dress and speech

Prof Hesham Sharaf Eldin