



EMERGENCY SURGERY - SKILLS

The transferable competence of Emergency Surgery requires assessment of both knowledge and skills. In order to provide evidence of appropriate skills candidates for the qualification must be able to present a complete and signed logbook.

The candidates' logbooks have to fulfil the UEMS criteria. In the logbook for each procedure the patient's initials (or hospital admission number), type of procedure, date of procedure, whether performed as principal surgeon or assistant and the signed approval of an independent expert have to be provided.

The individual logbooks are scrutinized in the Eligibility process. The minimum logbook requirement for eligibility for assessment for the F.E.B.S./EmSurg qualification is a certified number of 540 credit points for the procedures listed in Categories A, B, C and D of the Catalogue of Procedures below.

For each procedure performed by the candidate as principal surgeon (the principal surgeon is the person who performs the majority of the essential steps of the procedure) 2 credit points are given.

For each procedure performed by the candidate as assistant 1 credit point is given (except for procedures in Category A where credit points are given only for procedures performed as principal surgeon).

Candidates must have experience of all the procedures listed in Categories A, and B. In the case of procedures in Category A this must be as principal surgeon. No credit will be given for assisting a Category A procedure. In Category C candidates must achieve a minimum number of 100 credit points. There is, however, no minimum number required for individual procedures in this category.

The procedures listed in Category D (**Regional variations**) are not universally performed by General Surgeons. Many of these fall within the remit of other recognised specialties and sub-specialties and these are identified within this document. Although they do not form core procedures for this examination a minimum of 50 credit points must be achieved in this Category. However, no more than 50 credit points can be achieved from each section within Category D (i.e. Airway, Head & neck, Endoscopy A, Endoscopy B, Paediatric surgery A, Paediatric surgery B, Gynaecology, Vascular A, Vascular B, Plastics, Limb fractures and Ultrasound).

All the credit points from Category A and at least 120 credit points from Categories B, C and D must be achieved as principal surgeon. This means, that a total of 270 procedures are the minimum requirement, when they are all performed as principal surgeon.

All candidates should have successfully completed the Advanced Trauma Life Support (ATLS®) provider course. However, it is acknowledged that ATLS® is not currently available in all countries. As an alternative candidates may claim exemption from this requirement by demonstrating that they have performed the procedures listed in Category E provided they have documented at least 4 credit points for each procedure.

Candidates should also have completed either (i) the Definitive Surgical Trauma Care (DSTC®) course, (ii) the Definitive Surgical Trauma Skills (DSTS®) course or (iii) both the Advanced Trauma Operative Management (ATOM®) and the Advanced Surgical Skills for Exposure in Trauma (ASSET®) courses. However, it is acknowledged that these courses are not currently available in all countries. As an alternative candidates may claim exemption from this requirement by demonstrating that they have achieved the required number of credit points for the procedures listed in Category F.

As above for each procedure in categories E and F performed by the candidate as principal surgeon (the principal surgeon is the person who performs the majority of the essential steps of the procedure) 2 credit points are given. For each procedure performed by the candidate as assistant 1 credit point is given.

| Summary of Categories: | Minimum credit points required |
|--|---------------------------------------|
| A. Compulsory procedures - as principal surgeon only | 300 |
| B. Compulsory procedures - as principal surgeon or assistant | 90 |
| C. Other surgical procedures | 100 |
| D. Regional variations | 50 |
| TOTAL: | 540 |
| In addition candidates must have (i) successfully completed the ATLS® Provider course or obtained the required number of credit points for the procedures listed in Category E and (ii) successfully completed the DSTS® course (or approved alternative) or obtained the required number of credit points for the procedures listed in Category F. | |

| Catalogue of Procedures: | | Minimum credit points required |
|--|---|---------------------------------------|
| Category A: Compulsory Procedures - as principal surgeon only | | 300 |
| CODE: | | |
| A1. | percutaneous insertion of chest tube | 10 |
| A2. | diagnostic laparotomy or laparoscopy for perforation (non trauma) of which a minimum of 10 credits must be obtained for laparotomy and 10 credits for diagnostic laparoscopy. Where a definitive procedure has been performed this procedure may also be included in the logbook. | 30 |
| A3. | division of adhesions for small bowel obstruction | 20 |
| A4. | trauma laparotomy (access and exploration of the abdomen for trauma and dealing with injuries identified) | 8 |
| A5. | splenectomy | 6 |
| A6. | cholecystectomy (open or laparoscopic of which at least 36 credits must be obtained for laparoscopic cholecystectomy) | 40 |
| A7. | on table cholangiography | 6 |
| A8. | repair of gastric or duodenal perforation or surgical control of bleeding duodenal ulcer | 10 |
| A9. | small bowel resection with anastomosis (either open or laparoscopic) | 30 |
| A10. | ileostomy formation (loop or end of which at least 4 credits must be for a loop ileostomy and 4 credits for an end) | 10 |
| A11. | appendectomy (open or laparoscopic) | 40 |
| A12. | Hartmann's procedure | 10 |

| | | |
|------|--|----|
| A13. | colonic resection with primary anastomosis of which at least 5 procedure must involve a colo-colonic anastomosis | 20 |
| A14. | inguinal hernia repair | 20 |
| A15. | repair of femoral hernia | 10 |
| A16. | drainage anorectal abscess | 16 |
| A17. | incision, drainage, debridement for other soft tissue infections | 14 |

| | | |
|--|---|---------------------------------------|
| Category B: Compulsory procedures | | Minimum credit points required |
| | | 90 |
| B1. | tracheostomy | 4 |
| B2. | thoracotomy | 4 |
| B3. | sternotomy | 4 |
| B4. | damage control laparotomy (trauma or non-trauma) includes temporary abdominal closure | 6 |
| B5. | damage control of hepatic trauma | 4 |
| B6. | decompressive laparotomy for abdominal compartment syndrome | 4 |

| | | Minimum credit points required |
|------|--|---------------------------------------|
| B7. | repair of diaphragm (transabdominal or transthoracic) | 4 |
| B8. | fasciotomy of lower limb | 2 |
| B9. | debridement for necrotizing fasciitis | 4 |
| B10. | exploration of common bile duct | 4 |
| B11. | formation of roux-en-y | 4 |
| B12. | gastrectomy or partial gastrectomy (Billroth II) | 10 |
| B13. | reversal of colostomy | 4 |
| B14. | seton insertion for fistula in ano | 4 |
| B15. | suture repair of bladder | 4 |
| B16. | percutaneous cystostomy | 4 |
| B17. | repair of parastomal hernia | 4 |
| B18. | repair of incisional hernia | 12 |
| B19. | non-operative stabilizat on of pelvic fracture (e.g pelvic binder) | 4 |

| Category C: Other surgical procedures | | Minimum credit points required |
|--|---|---------------------------------------|
| | | 100 |
| Thorax | | |
| C THORAX 1. | repair of oesophageal injury | |
| C THORAX 2. | pulmonary resection | |
| C THORAX 3. | control/repair of tracheobronchial injury | |
| C THORAX 4. | control/repair of injury to innominate vessels | |
| C THORAX 5. | control/repair of injury to subclavian vessels | |
| C THORAX 6. | video assisted thoracoscopic surgery (VATS) | |
| C THORAX 7. | surgical drainage of thoracic infection and empyema | |
| Upper GI/HPB | | |
| C UGI/HPB 1. | open repair of paraesophageal hernia | |
| C UGI/HPB 2. | laparoscopic repair of paraesophageal hernia | |
| C UGI/HPB 3. | hepatic resection for trauma | |
| C UGI/HPB 4. | splenorrhaphy | |
| C UGI/HPB 5. | drainage of pancreatic pseudocyst | |
| C UGI/HPB 6. | choledochoscopy | |

| | | |
|--------------------|---|--|
| C UGI/HPB 7. | distal pancreatectomy | |
| C UGI/HPB 8. | choledochoenteric anastomosis | |
| C UGI/HPB 9. | pyloroplasty | |
| C UGI/HPB 10. | enterocolic bypass | |
| C UGI/HPB 11. | insertion of feeding jejunostomy | |
| C UGI/HPB 12. | pancreatic debridement | |
| Small bowel | | |
| C SB 1. | small bowel stricturoplasty for Crohn's disease | |
| C SB 2. | laparoscopic feeding jejunostomy | |
| C SB 3. | superior mesenteric artery embolectomy/ thrombectomy | |
| Colorectal | | |
| C COLO 1. | hemorrhoidectomy | |
| C COLO 2. | perineal operation for rectal prolapse | |
| C COLO 3. | open transabdominal operation for rectal prolapse | |
| C COLO 4. | laparoscopic transabdominal operation for rectal prolapse | |

| | | |
|----------------------|---|--|
| Urological | | |
| C URO 1. | repair of ureteric injury | |
| C URO 2. | orchidopexy | |
| C URO 3. | orchidectomy | |
| C URO 4. | repair of kidney trauma | |
| C URO 5. | nephrectomy | |
| Miscellaneous | | |
| C MISC 1. | laparoscopic drainage abdominal abscess | |
| C MISC 2. | advanced techniques for abdominal wall reconstruction | |
| C MISC 3. | insertion peritoneal dialysis catheter | |
| C MISC 4. | abdominal organ retrieval for transplant | |

| | | |
|---|--------------------------------|-----------------------|
| Category D - Regional variations | | Minimum 50 |
| | | |
| AIRWAY¹ | | Max 50 credits |
| D AIRWAY 1. | endotracheal intubation: nasal | |
| D AIRWAY 2. | rapid sequence induction | |

| | | |
|--|---|-----------------------|
| HEAD & NECK^{2,3,4,5} | | Max 50 credits |
| D H&N 1. | insertion of ICP monitoring device (bolt) | |
| D H&N 2. | creation of burr hole | |
| D H&N 3. | craniotomy | |
| D H&N 4. | reduction and stabilization of maxillofacial fracture | |
| D H&N 5. | exploration of the neck for trauma | |
| D H&N 6. | repair of carotid artery injury | |
| ENDOSCOPY^{6,7} | | |
| Endoscopy A: | | Max 50 credits |
| D ENDO A 1. | therapeutic upper GI endoscopy: haemorrhage control | |
| D ENDO A 2. | therapeutic upper GI endoscopy: stent insertion | |
| D ENDO A 3. | percutaneous endoscopic gastrostomy | |
| D ENDO A 4. | therapeutic colonoscopy: stent insertion | |
| D ENDO A 5. | therapeutic colonoscopy: haemorrhage control | |
| D ENDO A 6. | therapeutic colonoscopy: clip application for leak | |

| | | |
|---------------------------------------|--|-----------------------|
| Endoscopy B: | | Max 50 credits |
| D ENDO B 1. | bronchoscopy: diagnostic | |
| D ENDO B 2. | upper GI endoscopy: diagnostic | |
| D ENDO B 3. | diagnostic flexible sigmoidoscopy | |
| D ENDO B 4. | diagnostic colonoscopy | |
| | | |
| PAEDIATRIC SURGERY⁸ | | |
| Paediatric surgery A: | | Max 50 credits |
| D PAED A 1. | emergency operation for paediatric malrotation | |
| D PAED A 2. | repair paediatric intestinal atresia/stenosis | |
| D PAED A 3. | repair of omphalocele | |
| D PAED A 4. | procedure for meconium ileus | |
| D PAED A 5. | procedure for necrotizing enterocolitis | |
| D PAED A 6. | repair of gastroschisis | |
| | | |
| Paediatric surgery B: | | Max 50 credits |
| D PAED B 1. | paediatric colostomy formation | |
| D PAED B 2. | paediatric ileostomy formation | |

| | | |
|--------------------------------|---|-----------------------|
| D PAED B 3. | repair of paediatric diaphragmatic hernia | |
| D PAED B 4. | inguinal herniorrhaphy in children | |
| D PAED B 5. | umbilical hernia repair in children | |
| D PAED B 6. | emergency operation for paediatric intussusception | |
| D PAED B 7. | pyloromyotomy (in children) | |
| GYNAECOLOGY⁹ | | Max 50 credits |
| D GYN 1. | salpingo-oophorectomy | |
| D GYN 2. | hysterectomy | |
| D GYN 3. | Caesarian section | |
| D GYN 4. | excision of ovarian cysts | |
| VASCULAR⁵ | | |
| Vascular A: | | Max 50 credits |
| D VASC A 1. | graft revision | |
| D VASC A 2. | exploration of graft for post-op bleed/thrombosis/infection | |
| D VASC A 3. | insertion of vena caval filter | |
| D VASC A 4. | resuscitative endovascular balloon occlusion of the aorta (REBOA) | |

| | | |
|--------------------|---|-----------------------|
| D VASC A 5. | repair of injury to inferior vena cava | |
| D VASC A 6. | repair of injury to abdominal aorta | |
| D VASC A 7. | repair of peripheral vessels | |
| D VASC A 8. | repair graft-enteric fistula | |
| D VASC A 9. | repair ruptured aortic aneurysm | |
| D VASC A 10. | temporary shunting of vascular injury | |
| Vascular B: | | Max 50 credits |
| D VASC B 1. | balloon angioplasty | |
| D VASC B 2. | graft thrombectomy | |
| D VASC B 3. | on-table angiography | |
| D VASC B 4. | femoral artery: embolectomy/thrombectomy | |
| D VASC B 5. | brachial artery: embolectomy/thrombectomy | |
| D VASC B 6. | venous embolectomy/thrombectomy | |
| D VASC B 7. | surgical accesses for hemodialysis | |
| D VASC B 8. | above knee amputation | |
| D VASC B 9. | below knee amputation | |
| D VASC B 10. | transmetatarsal amputation | |

| | | |
|-----------------------------------|---|-----------------------|
| PLASTICS¹⁰ | | Max 50 credits |
| D PLASTICS 1. | burn debridement | |
| D PLASTICS 2. | split skin graft | |
| D PLASTICS 3. | full thickness skin graft | |
| | | |
| LIMB FRACTURES³ | | Max 50 credits |
| D LIMB # 1. | closed reduction of fracture | |
| D LIMB # 2. | debridement and reduction of open fracture | |
| D LIMB # 3. | reduction of joint dislocation | |
| D LIMB # 4. | stabilization of fractures: application of traction | |
| D LIMB # 5. | stabilization of fracture with external fixation device | |
| | | |
| ULTRASOUND¹¹ | | Max 50 credits |
| D U/S 1. | extended focused assessment with sonography for trauma (EFAST scan) | |
| D U/S 2. | ultrasound guided drainage of superficial and deep abscess/collection | |

| | |
|---|---------------------------------|
| Category E: as an alternative to attending the ATLS® course candidates must have performed the following procedures: | Minimum credit points required: |
| 1. endotracheal intubation: oral | 4 |
| 2. cricothyroidotomy: percutaneous | 4 |
| 3. cricothyroidotomy: open | 4 |

| | |
|--|---------------------------------|
| Category F: as an alternative to the DSTC® (or approved equivalent) course candidates must have performed the following procedures: | Minimum credit points required: |
| 1a. neck exploration for trauma | 4 |
| 1b. control/repair of visceral injury to the neck | |
| 2a. resuscitative thoracotomy | 4 |
| 2b. repair of cardiac injury | |
| 2c. creation of pericardial window | |
| 3a. pelvic packing | 4 |
| 3b. control/repair of duodenal trauma | |
| 3c. retroperitoneal approach (right and left medial visceral rotations) | |
| 4a. inferior vena cava repair | 4 |
| 4b. aortic/inguinal inflow control | |
| 4c. use of vascular shunts | |

Other UEMS recognised specialties and subspecialties performing procedures in Category D:

1. Anaesthesiology
2. Neurosurgery
3. Trauma surgery
4. Oro-maxillofacial surgery
5. Vascular surgery
6. Coloproctology
7. Thoracic surgery
8. Paediatric surgery
9. Gynaecology & obstetrics
10. Plastic, reconstructive and aesthetic surgery
11. Interventional radiology

© UEMS Division of Emergency Surgery 2018