Programme Title: MSc/PGDip in Critical Care Medicine

Queen Mary, University of London

Programme Specification (PG)

Awarding body / institution: Queen Mary, University of London
Teaching institution: Queen Mary, University of London
Name of final award and programme title: MSc Critical Care (FT, PT & VM)
Name of interim award(s): PGDip Critical Care (FT & PT)
Duration of study / period of registration: 1 year FT, 2 Years PT; 2-4 years VM
QMUL programme code(s): A3T7 (MSc FT), A3T8 (MSc VM) A3TD (MSc PT) A3TI (PGDip FT), A3TJ (PGDip PT)
QAA Benchmark Group: 
FHEQ Level of Award: Level
Programme accredited by: 
Date Programme Specification approved: 
Responsible School / Institute: William Harvey Research Institute

Schools / Institutes which will also be involved in teaching part of the programme:

Institution(s) other than QMUL that will provide some teaching for the programme:

Programme outline

Intensive care is a young, expanding specialty. Within the UK there are recently established training programmes and examinations as well as a new Faculty of Intensive Care Medicine within The Royal College of Anaesthetists. Specialist nurses and allied health professionals also play a key role in the delivery of safe and effective patient care within the specialty which is highly technical, with an expanding and rapidly evolving evidence base. This programme for clinicians, senior nurses and allied health professionals working in Critical Care Medicine is intended to provide participants with a thorough grounding in the discipline, together with the tools to maintain their knowledge base, through a course of advanced, specialist instruction. The programme is designed to ensure that course participants acquire the theoretical understanding and skills to advance and promote knowledge in the specialty and develop their leadership skills. Accordingly students will be carefully selected to ensure that they are able to meet the high academic standards required to successfully complete the course. This MSc programme provides the opportunity to obtain a higher degree through general study at a high level, rather than by undertaking a specific research project.
Programme Title: MSc/PGDip in Critical Care

**Aims of the programme**

- This programme aims to provide advanced theoretical and practical teaching covering a broad range of key topics related to the management of the critically ill or injured patient.
- This programme aims to develop the skills, knowledge and confidence required to provide leadership in the provision of the highest standards of critical care.
- This programme aims to develop competence in critical appraisal of research and the skills to conduct robust clinical audit.

**What will you be expected to achieve?**

When completing the MSc/PGDip in Critical Care students will be expected to achieve the following learning outcomes:

- Understand the approach to advanced life support of the unconscious patient.
- Describe in detail the available methods of organ support in critical illness.
- Describe the normal physiology of the cardiovascular, respiratory, renal and hepatic system.
- Give an objective description of the range of clinical outcomes following critical illness.
- Understand the range of methodological approaches to resolving uncertainty through research.
- Describe the approach to early care of the multiply injured patient.
- Understand the application of the theory modules to the day to day practice of critical care medicine.

<table>
<thead>
<tr>
<th>Academic Content:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>A 1</strong></td>
<td>The particular needs of special categories of critically ill patients</td>
</tr>
<tr>
<td><strong>A 2</strong></td>
<td>Demonstrate the appropriate use of clinical information for diagnosis and management of patients.</td>
</tr>
<tr>
<td><strong>A 3</strong></td>
<td>Use their knowledge of pathophysiology as a foundation for understanding the clinical presentation and management of patients.</td>
</tr>
<tr>
<td><strong>A 4</strong></td>
<td>Clear understanding of management of patients after trauma, major vascular, abdominal, and cardiac surgery</td>
</tr>
<tr>
<td><strong>A 5</strong></td>
<td>Understanding-how to identify the common sites and organisms responsible for infections in critically ill patients.</td>
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<tr>
<td><strong>A 6</strong></td>
<td>Understand the nutritional needs of critically ill patients recommend and monitor appropriate nutritional support.</td>
</tr>
<tr>
<td><strong>A 7</strong></td>
<td>Monitor and manage anticipated disturbances of fluids and electrolytes, including identifying the need for urgent dialysis.</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Disciplinary Skills - able to:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B 1</strong></td>
<td>Analyse, synthesise and communicate clinical information to a multi-disciplinary team</td>
</tr>
<tr>
<td><strong>B 2</strong></td>
<td>Use a critical appraisal of research evidence as a framework for high-level, prompt clinical decision making</td>
</tr>
</tbody>
</table>
Programme Title: MSc/PGDip in Critical Care

<table>
<thead>
<tr>
<th>B3</th>
<th>Understand the tools and methodologies for conducting research and how to formulate a structured and critical argument for a research question with the submission of a dissertation relevant to critical care</th>
</tr>
</thead>
<tbody>
<tr>
<td>B4</td>
<td>To communicate with other physicians and health care workers in a collaborative way to plan patient care.</td>
</tr>
</tbody>
</table>

Attributes:

<table>
<thead>
<tr>
<th>C1</th>
<th>Develop the leadership skills required to co-ordinate an effective team approach to the delivery of critical care</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2</td>
<td>Demonstrate appropriate and comprehensive practical and theoretical skills as well as advanced communication expertise- allowing decision making in complex and unpredictable situations</td>
</tr>
<tr>
<td>C3</td>
<td>Can act autonomously in planning and implementing tasks at a professional level</td>
</tr>
<tr>
<td>C4</td>
<td>Demonstrate autonomy in self directed learning and realise their scope of practice</td>
</tr>
</tbody>
</table>

How will you learn?

Teaching strategy
We will use a range of learning and assessment strategies:
Whole group seminars/lectures on specific topics. Tutors and students will be encouraged to develop a tutorial atmosphere in which dialogue and discussion can take place.
Whole group practical classes to address a specific practical method (e.g. airway management skills) or management of a particular clinical problem.
Whole group demonstrations. These may take place in a clinical environment, skills laboratory or classroom to address a specific skill (e.g. care of chest tubes, tracheostomy)
Individual tuition will take place for all students, or for students who require additional input in a particular skills area.

Learning strategy
The provision of simulator experience for developing clinical skills will enable students to maximise their ability to understand the principles and develop their technical abilities for use in the critical care environment.
Self-directed learning is a component of each module and will encourage students to identify their own learning needs as modules progress.
Course tutors will advise on issues arising from the course, and will act as mentors to advise on post-course employment and further training opportunities. Students will have full access to the college/medical school library and student computing facilities.

How will you be assessed?

Each module will be assessed by the course tutor on the basis of written work, examination and presentations by trainees who have achieved all the required learning objectives of the module.
Programme Title: MSc/PGDip in Critical

How is the programme structured?
Please specify the full time and part time programme diets (if applicable). The description should be sufficiently detailed to fully define the structure of the diet.

<table>
<thead>
<tr>
<th>Academic Year of Study</th>
<th>Module Title</th>
<th>Module Code</th>
<th>Credits</th>
<th>Level</th>
<th>Module Selection Status</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The pathophysiological basis of critical illness</td>
<td>WHR7010</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>Semester 1</td>
</tr>
<tr>
<td></td>
<td>Supportive care for failing organ function</td>
<td>WHR7011</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>Semester 1</td>
</tr>
<tr>
<td></td>
<td>Care of the unconscious patient</td>
<td>WHR7012</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>Semester 1</td>
</tr>
<tr>
<td></td>
<td>Decision making, communication outcomes and ethics</td>
<td>WHR7013</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>Semester 2</td>
</tr>
<tr>
<td></td>
<td>Research and Audit Methodology</td>
<td>WHR7014</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>Semester 2</td>
</tr>
<tr>
<td></td>
<td>Special Patient Groups</td>
<td>WHR7015</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>Semester 3</td>
</tr>
<tr>
<td></td>
<td>Neurocritical Care and Trauma Management</td>
<td>WHR7016</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>Semester 2</td>
</tr>
</tbody>
</table>

*To be eligible for an award MSc Full Time student must satisfactorily complete:
  Semester 1 (60 credits)
  Semester 2 (60 credits)
  Dissertation (60 credits)

*For part time MSc students, the Dissertation is taken in the second year, and the remaining 8 modules are split over two years: 90 credits (6x15 credits) to be taken in year one
  30 credits (2x15 credits) to be taken in year two + 60 credits dissertation

*To be eligible for an award PGDip Full Time student must satisfactorily complete: 8 taught modules (120 credits) in one year.

*To be eligible for an award PGDip Part Time student must satisfactorily complete: 4 taught modules (60 credits) in year 1
  and 4 taught modules (60 credits) in year 2 (students are allowed to select taught modules in order of their preference).

For Variable mode MSc Critical Care students should take the taught modules over 2-4 year period (a maximum of 90 credits of Compulsory modules - WHR7010, WHR7011, WHR7012, WHR7013, WHR7014, WHR7015, WHR7016, WHR7017 each year) with the dissertation module (WHR7018) in the final year.
Programme Title: MSc/PGDip in Critical Care

<table>
<thead>
<tr>
<th>Module Title</th>
<th>Module Code</th>
<th>Credits</th>
<th>Level</th>
<th>Module Selection Status</th>
<th>Academic Year of Study</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical observership</td>
<td>WHR7017</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>1</td>
<td>Semester 3</td>
</tr>
<tr>
<td>Dissertation</td>
<td>WHR7018</td>
<td>60</td>
<td>7</td>
<td>Compulsory</td>
<td>1</td>
<td>Year long</td>
</tr>
</tbody>
</table>

What are the entry requirements?

Both UK and overseas doctors and nurses with a medical or nursing degree are eligible to apply, as are Allied Health Professionals. Students will be carefully selected to ensure that they are able to meet the high academic standards required to successfully complete the course.

For overseas doctors and nurses in addition to the above criteria all candidates should provide scores of any English language test e.g. IELTS (minimum score required IELTS 6.5)

The Full Time programme is also open to undergraduate medical students who wish to (and are eligible to) intercalate a Masters degree into their MBBS studies.

For these students there are entry criteria that differ from non-intercalating applicants - in addition to the equivalent English proficiency, intercalating students need to have:
1. Successfully completed at least three years of the MBBS, MbChB or equivalent medical course (for clinically based masters this must include the equivalent of one year of patient based teaching (in hospital/GP practices/clinics))
2. Passed year 3 or 4 exams immediately prior to entry at the first opportunity
3. Demonstrate a clear and unequivocal interest in the field by written application and/or interview
4. For students internal and external to QMUL it is confirmed that the beginning of the first term for the following year starts after all the QMUL Masters assessments are completed

How do we listen to and act on your feedback?

The course will be managed and monitored by the Core Course Management Team. Progress through the course will be managed as indicated below:
- A student who satisfactorily passes four taught modules but elects not to complete eight taught modules will be eligible for a Postgraduate Certificate in Critical Care.
- A student who satisfactorily passes eight taught modules, but elects not to complete the dissertation, will be eligible for a Postgraduate Diploma in Critical Care.

Indicators of Quality

The course will be continuously quality-reviewed by the Core Course Management Team. This will include peer review of taught components, student feedback on lecture and module content and delivery. A course participant will be invited to join the Student-Staff Liaison Committee.

Periodically, the continuing validity of the course aims and outcomes will be reviewed both internally and if necessary by involving external experts to ensure that appropriate actions are taken to remedy any identified shortcomings.

What academic support is available?

Academic Support
- Induction programme for orientation and introducing study skills.
- Student Handbook and Module Guides.
- Extensive library facilities and other learning resources (e.g. Patient-Centred Acute Care Training - PACT), available at the Charterhouse Square and hospital sites
- All students will be allocated personal tutors whose role is to assist them with personal problems and to advise on pastoral issues.
Programme Title: MSc/PGDip in Critical Care

- Student email and open personal access to tutorial staff including the Course Directors.
- Access to student counsellors within Queen Mary University of London.
- Access to Teaching and Learning Support Services, which provides assistance and guidance e.g. dyslexia

Programme-specific rules and facts

Specific support for disabled students

Queen Mary has a central Disability and Dyslexia Service (DDS) that offers support for all students with disabilities, specific learning difficulties and mental health issues. The DDS supports all Queen Mary students: full-time, part-time, undergraduate, postgraduate, UK and international at all campuses and all sites.

Students can access advice, guidance and support in the following areas:
- Finding out if you have a specific learning difficulty such as dyslexia
- Applying for funding through the disabled Students' Allowance (DSA)
- Arranging DSA assessments of need- Special arrangements in examinations
- Accessing loaned equipment (e.g. digital recorders)
- Specialist one-to-one 'study skills' tuition
- Ensuring access to course materials in alternative formats (e.g. Braille)
- Providing educational support workers (e.g. note takers, readers, library assistants)
- Mentoring support for students with mental health issues and conditions on the autistic spectrum

Links with employers, placement opportunities and transferable skills

Healthcare providers, including the National Health Service, will benefit from employing students who have successfully completed this MSc. The aim of this course is to provide advanced specialist instruction to a higher qualification in critical care. The Chief Medical Officer Report (2009) "Safer Medical Practice" and Department of Health documents "High Quality Care For All" & "High Quality Workforce" emphasise and recommend Simulation, Clinical Skills Training and application of innovative approaches to education. Recent patient safety data from the National Patient Safety Agency (NPSA) suggests 1:10 patients are harmed in hospital by some complication, a significant proportion of these being caused by medical and nursing mistakes. This MSc will consolidate clinical training to a high level and reinforce technical and behavioural competencies essential for patient safety.

Programme Specification Approval

Person completing Programme Specification: Professor Rupert Pearse/ Dr Nina Ravic

Person responsible for management of programme: Professor Pearse

Date Programme Specification produced / amended by School / Institute Learning and Teaching Committee: 19/05/2023 (For 23/24)
Programme Title: MSc/PGDip in Critical

Date Programme Specification approved by Taught Programmes Board: