Programme Title: IBSc in Prehospital Medicine

Awarding body / institution: Queen Mary, University of London
Teaching institution: Queen Mary, University of London
Name of award and field of study: IBSc Prehospital Medicine
Name of interim award(s): NA
Duration of study / period of registration: one academic year
QMUL programme code / UCAS code(s): UBZF-QMIHSE1 - USPHO - B9MF
QAA Benchmark Group: Medicine
FHEQ Level of Award : Level 6
Programme accredited by: Queen Mary, University of London
Date Programme Specification approved: 
Responsible School / Institute: Institute of Health Sciences Education

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

Collaborative institution(s) / organisation(s) involved in delivering the programme:
London's Air Ambulance

Programme outline

Prehospital Medicine is an interdisciplinary field dedicated to the treatment of injury and illness outside hospital. An innovative and growing field, it has recently been recognized as a sub-specialty by the GMC. The programme was created and will be run in collaboration with London’s Air Ambulance - being delivered and supervised by faculty from London's Air Ambulance and Barts and The London School of Medicine. Teaching will also be given by other experts in prehospital medicine and related disciplines.

The taught modules will cover applied science, resuscitation and trauma, as related to prehospital medicine, and an integrated topics module covering the fundamental principles for understanding and operating as part of a team safely and effectively in a prehospital environment. The two other elements of the programme are a) the Project, wherein the students will undertake a substantial piece of supervised work in either a science or social science based discipline and b) a Clinical Applications Module, which will enable students to engage with the variety of other related services for example; the the ambulance service, the fire and rescue services, the police, the RNLI etc and also indirectly related but centrally concerned bodies such as the motor industry and manufactures of medical equipment. Learning in the clinical and integrated topics elements will be recorded through a portfolio format.

The BSc in Prehospital Medicine will be appropriate for all U.K. and international students who have successfully completed one year of undergraduate clinical medicine (e.g. Yr3 MBBS or equivalent).
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Students will be expected to contribute to their learning process throughout the programme through a variety of interactive educational activities which will be recorded and monitored primarily through the aforementioned portfolios. Throughout the programme students will have mentored placements with London’s Air Ambulance and the London Ambulance Service.

Aims of the programme

The programme would build on the acclaimed prehospital care programme for medical students that was initiated at Barts and the London School of Medicine, and replicated throughout the UK. Subspecialty recognition of prehospital medicine in the UK by the GMC has created a formal postgraduate structure for training. Internationally, doctors are increasingly engaged in prehospital systems in diverse circumstances. A significant aim of the programme would be to set international standards for the future in prehospital medicine at an undergraduate level.

This one-year intercalated BSc programme aims to provide students with a strong foundation in the science and practical skills required for a successful career in prehospital medicine - and is highly relevant to other acute care specialties as well as excellent preparation for FY1/FY2 doctors who are interested a career within a broad range of disciplines. Further, it will provide students with significant grounding in interprofessional working, leadership, and governance. Having embarked on this programme of study, students would be well prepared for employment in many diverse areas.

Through all of the educational activities in the programme i.e. taught or experiential, students will be encouraged to engage in a high-level independent study, with which to further their understandings of the field and to enhance their skills as life-long learners. In particular, a module devoted to subject specific research will provide students with an opportunity to understand research methodology, and apply their knowledge to a range of subject areas.

By creating a new programme of study, opportunities for access to higher education would be broadened and specifically for the specialty of prehospital medicine, would provide unique opportunities that have not existed before.

What will you be expected to achieve?

Students who successfully complete this programme will have knowledge and insights into the medical sciences that underpin prehospital medicine. They will also understand the operations and contexts of the related services and be familiar with the wide range of team working and leadership elements at play, including governance processes. Students will have an opportunity to appreciate the impact of human factors on medical decision making and on patient outcomes. The projects and the personal studies will not only enable students to demonstrate academic ability but also their commitment to learning and engagement within this area of study.

Please note that the following information is only applicable to students who commenced their Level 4 studies in 2017/18, or 2018/19

In each year of undergraduate study, students are required to study modules to the value of at least 10 credits, which align to one or more of the following themes:

- networking
- multi- and inter-disciplinarity
- international perspectives
- enterprising perspectives.

These modules will be identified through the Module Directory, and / or by your School or Institute as your studies progress.
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Academic Content:

A1 Apply the core sciences [applied anatomy, pharmaco-toxicology, applied haematology and applied physiology] to patient presentations in the pre-hospital phase of care.

A2 Demonstrate a systematic appraisal of the key aspects of resuscitation science (reference level 6 descriptor for the framework for higher education qualifications in England, Wales and Northern Ireland August 2008 (FHEQ), and critique aspects of current research in the discipline of resuscitation science.

A3 Critical Knowledge and awareness of current challenges in the discipline of trauma science. Students will be led by experts in the field of trauma science, through both novel and contemporary areas of the subject with the help of international experts in trauma based at London's Air Ambulance and Queen Mary University.

A4 Discuss the psychological impact of prehospital care from the perspective of both service receivers and deliverers; Scene Management and Safety and Major Incident Planning;

A5 Critique the effective Interprofessional Learning and Working; Leadership and Team-building - including considerations of suitable models for prehospital medicine

A6 Demonstrate an awareness of the ethical and medico-legal decision-making through experience with patients in their own homes, with the relevant legal framework, especially around mental health.

A7 To deploy accurately established techniques of analysis and enquiry within a discipline, manage their own learning and to make use of scholarly reviews and primary sources (for example through analysis of retrospective database analysis, and in the analysis of relevant publications on outcomes from cardiac arrest in trauma patients).

A8 Demonstrate a critical understanding of clinical governance methodologies by investigating clinical governance and ‘death and disability’ session outcomes under supervision.

Disciplinary Skills - able to:

B1 Perform clinical skills appropriate to their level of training and the context of pre-hospital medicine.

B2 Demonstrate acquisition of teaching skills through preparing, delivering and evaluating a teaching event. Further, they will be giving feedback to peers in both verbal and written forms.

B3 Demonstrate the ability to deal with uncertainty and work within a changing environment - the pre-hospital phase is a diverse environment where each patient presentation can be in a different context.

Attributes:

C1 Within the process of the programme students will learn how to work collaboratively, both within teams and as individuals, toward understanding and managing effective interprofessional working and will demonstrate that they can apply appropriate levels of professional interpersonal practice to facilitate such working.

C2 Demonstrate their ability to work within a team, for example at the scene of a road traffic collision where team members have never met, or rehearsed together.

C3 Be able to engage in reflective practice and appraisal of their own and other’s work, for example in the preparation of individual presentations and in the peer review of presentations given by colleagues.

How will you learn?

Several learning methods are employed throughout the course - some being common to the entire course and some are specific to each module.

The applied science module consists of learning time in the anatomy suite at Queen Mary University where students work.
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through a series of applied anatomy cases with the assistance of the prosection team and a number of senior clinicians. Applied physiology learning takes a variety of forms but problem based learning is a predominant method. Pharmacotoxicology takes a scientific and holistic approach where problem based learning is accompanied by seminars led by key experts from the drug and alcohol agencies, the police and the multidisciplinary team.

Resuscitation science learning is through invited guest lecturers on specialist subjects, through student peer to peer supervised presentations, and through patient follow-up presentations to an expert panel.

The trauma module uses problem based learning to build and consolidate knowledge gained in the applied science module, whilst utilising ‘long case’ discussions, led by a senior clinician in order to focus on a ‘top twenty’ subject areas.

The experiential elements of the programme will employ practical activities such as; placements, field trips, workshops, seminars, where students will be involved in demonstrations, presentations and skills based activities.

The clinical and skills based work will include elements such as the practical management of teaching, moulages, delivering presentations and practical demonstrations.

Students will also expected to be self-directed learners and will engage in understanding their own learning processes to enable them to work effectively either alone or in a team. Students will also be encouraged to be proactive in finding areas of interest that they can include in their learning.

How will you be assessed?

Assessment is used to test the learning outcomes of individual modules and include, but are not limited to; Examination, Portfolio, case presentations, teaching inputs, independent research project.

How is the programme structured?

Please specify the structure of the programme diets for all variants of the programme (e.g. full-time, part-time - if applicable). The description should be sufficiently detailed to fully define the structure of the diet.

Students study for one academic year and modules are delivered sequentially:
- Applied sciences takes place in term one (15 credits at Level 6)
- Resuscitation Science takes place in terms one and two (15 credits at Level 6)
- Trauma Science takes place in terms two and three (15 credits at Level 6)

Three modules are taken across the academic year:
- Integrated Topics takes place across the entire year (30 credits at Level 6)
- Clinical Experiences (15 credits at Level 6)
- Project commences at the start of the year (where project titles and supervisors are assigned), and this ends at the completion of teaching (30 credits at Level 6)

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What are the entry requirements?

Because this is a clinical (medical) programme, students have to be currently engaged in a medical undergraduate degree such as an MBBS and have successfully completed 3 years or equivalent of their medical studies. BDS and BVetMed students will not be eligible to apply.

How will the quality of the programme be managed and enhanced? How do we listen to and act on your feedback?

The Staff-Student Liaison Committee provides a formal means of communication and discussion between the Institutes and its students. The committee consists of student representatives from each year in the Institute together with appropriate representation from staff within the Institute. It is designed to respond to the needs of students, as well as act as a forum for discussing programme and module developments. Staff-Student Liaison Committees meet regularly throughout the year.

Each Institute operates an Education Committee which advises the Institute Director of Education and teaching staff on all matters relating to the delivery of taught programmes at Institute level including monitoring the application of relevant QM policies and reviewing all proposals for module and programme approval and amendment before submission to Taught Programmes Board. Student views are incorporated in the committee’s work in a number of ways, such as through student membership, or consideration of student surveys.

All Institutes operate an Annual Programme Review of their taught undergraduate and postgraduate provision. APR is a continuous process of reflection and action planning which is owned by those responsible for programme delivery. Students’ views are considered in this process through analysis of the NSS and module evaluations.

What academic support is available?

Academic support is provided jointly between London’s Air Ambulance and Barts and The London School of Medicine. The programme directors take responsibility for providing academic support. Specific areas for academic support, for example the project are delegated to nominated, esteemed individuals with a track record in supporting the type of work. For the clinical component, students will be allocated clinical mentors, who will assess the academic content of the portfolio.
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For any pastoral support, Drs Goodsman and Grier will be the initial contact points and will also have the primary role of student (pastoral) mentors.

How inclusive is the programme for all students, including those with disabilities?

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 like 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.

For further types of student support please contact the following:

Welfare
If students need advice or have any problems outside the academic programme, they can see medical school’s Dean for Students. Contact person Desna Roberts; d.roberts@qmul.ac.uk. Dean for Students Office 2nd Floor, Garrod Building, Whitechapel. Or see the College’s Student Services Officer (Room OB3 Office door) first. There is also a college Advice and Counselling Service, situated in the Geography Building, where students can appointment to see a Welfare Advisor for confidential advice and information on practical difficulties: financial, immigration, extension of stay, legal or other matters.

Occupational Health Service
The College has and Occupational Health Service who are involved in the prevention of work/study related ill health, facilitating rehabilitation after illness and injury, and promoting physical and mental wellbeing. Contact helpdesk: occhealth@qmul.ac.uk

Health.
Health Centre is located on the ground floor of the Geography Building (just behind Queens Building). It is open from 9.00 a.m. to 4.30 p.m. Monday to Friday. A registered nurse is on duty throughout these times.

Programme-specific rules and facts

Links with employers, placement opportunities and transferable skills

There are extensive opportunities for placements during the year. Approximately one day per week is allocated to rotating clinical placements across the spectrum of prehospital medicine, for example, physician led response cars, ambulances, mass gathering events, electrophysiology laboratories, percutaneous coronary intervention suites for the resuscitation modules.

Field visits are integral to the year of study and for example encompass visits to road safety laboratories, search and rescue facilities and defibrillator manufacturing centres.
Students will have opportunities to meet and engage with key figures in the area of prehospital medicine through invited guest lectures and seminars. Specific presentations around the various careers (including international careers) are timetabled in the course programme.

### Programme Specification Approval

<table>
<thead>
<tr>
<th>Person completing Programme Specification:</th>
<th>Prof D Goodsman</th>
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<tr>
<td>Person responsible for management of programme:</td>
<td>Prof D Goodsman</td>
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<tr>
<td>Date Programme Specification produced / amended by School / Institute Education Committee:</td>
<td>11.12.23 (for Sept 2024)</td>
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Queen Mary University of London