

Programme Specification 2018-19**POSTGRADUATE CERTIFICATE IN ADVANCED CLINICAL PRACTICE
(PHEM: Pre-Hospital Emergency Medicine)**

Awarding body	University of Cambridge
Teaching institution	University of Cambridge
Accreditation details	None
Name of final award	Postgraduate Certificate
Programme title	Postgraduate Certificate in Advanced Clinical Practice (PHEM)
UCAS code	N/A
HECoS code(s)	100749 (paramedic science)
Relevant QAA benchmark statement(s)	QAA Subject Benchmark Statements – 1 Paramedics, 2. Nursing
Qualifications framework level	FHEQ Level 7
Date specification produced	October 2018

* Cognate Faculty endorsement provided by: School of Clinical Medicine

The Postgraduate Certificate in Advanced Clinical Practice (PHEM) is part of the Institute of Continuing Education's award-bearing programme at FHEQ level 7, offered to part-time adult students.

ICE is a General Board, non-School institution whose purpose can be defined in two complementary ways. It is a conduit both for transmission of the University's knowledge and research on the one hand and for enabling members of the public to access higher education courses, whether for personal interest or professional development, on the other. In these ways it contributes significantly to the University's public engagement and widening participation commitments.

Introduction

Pre-Hospital Emergency Medicine (PHEM) is the area of clinical practice focused on immediate emergency care at the scene and in transit to hospital for persons critically ill or injured. Paramedic and Nurse practitioners are the key providers of PHEM. This innovative academic programme complements the national development of PHEM as a specialist area of medical practice providing Paramedics and Nurses access to a rigorous academic programme. The course follows recommendations from the Paramedic Evidence-Based Education Project and fits with the recent focus of the College of Paramedics (CoP) on post-registration career pathways. Participation on this post-registration programme allows Paramedics and Nurses to undertake extended breadth and depth of study and to develop their theoretical understanding and clinical practice in an equivalent way to medical professionals.

Educational aims

The programme will:

1. Contribute to shaping regional and national perspectives relating to continuing professional development of advanced clinical practitioners.
2. Meet the College of Paramedics' post registration career framework aspirations related to PHEM practice.

3. Develop a postgraduate programme which is open to healthcare professionals (Paramedics and Nurses) within the East of England and further afield who are eligible to undertake accreditation as an Advanced PHEM practitioner.
4. Develop a cohort of Advanced Practitioners possessing a depth and breadth of knowledge and understanding within the specialist field of PHEM.
5. Develop specialist knowledge of human factors and professional behaviours which impact upon the delivery of PHEM, demonstrating flexibility and adaptability to optimise care provision.
6. Equip PHEM trainee practitioners with a flexible and analytical approach to advanced care delivery and leadership of both theoretical and practical aspects of PHEM practice; developed through broad ranging and appropriate academic and clinical learning opportunities supporting development of an advanced role.
7. Promote scholarship in clinical training programmes for PHEM which contributes to practice development through individual clinicians influencing local care provision and leading national research agendas.
8. Facilitate development of a cadre of Advanced and Consultant practitioners with the knowledge, skills and behaviours required for this level of PHEM practice and equipped with eligibility for professional recognition via the Faculty of Pre-hospital Care's accreditation programme for Consultant (Level 8) Practice.

Learning outcomes

Students will gain the knowledge, technical, and non-technical skills that underpin advanced practice in PHEM. These skills map to the national PHEM curriculum (Figure 1 and Table 1).



Figure 2: Schematic illustration of the curriculum framework for PHEM produced by the Intercollegiate Board for Training in Pre-hospital Emergency Medicine (www.ibtphem.org.uk).

Knowledge and understanding; Skills and other attributes

Module	Learning Outcomes: By the end of the course you should be able to	National PHEM curriculum elements	Assessment methods
Advanced Clinical Assessment	<ul style="list-style-type: none"> Show critical and systematic understanding of the aetiology, physiology and pathophysiology of key body systems and common PHEM presentations. 	2.1.1 2.1.2 2.1.3 2.1.7 2.1.8	Formative Assessment: (1) Practice Assessment Document (2)

	<ul style="list-style-type: none"> • Critically appraise advanced clinical assessment and diagnostic strategies, including the use of technology, across the lifespan, as applied in PHEM settings. • Initiate appropriate evidence based interventions based upon sound clinical reasoning and critical appraisal for frequently encountered PHEM presentations. • Formulate appropriate management plans, for frequently encountered PHEM patients across the lifespan, based upon advanced clinical analysis. • Demonstrate knowledge and understanding of dynamic risk assessment and management in a range of selected clinical scenarios encountered in PHEM practice. • Demonstrate flexible and adaptable advanced clinical knowledge and understanding to function as an effective PHEM practitioner. • Demonstrate patient assessment, using appropriate PHEM diagnostic tools, to form safe and effective clinical interventions. 	2.1.9 2.1.10 2.1.11 2.1.12 2.1.13 2.1.14 2.1.15 2.1.16 2.4.2 2.4.4 2.5.9 2.5.11 2.9.2 2.9.12 2.10.1 2.11.1 2.12 3.3.1(i, k, j, m) 3.3.2(i, k, j, m) 3.3.3(i, k, j, m)	Log book Summative Assessment: (1) OSPE (2) Written Examination
Clinical leadership & Decision Making	<ul style="list-style-type: none"> • Evaluate and selectively apply context specific clinical leadership strategies in a range of PHEM settings. • Demonstrate the structured application of situationally appropriate human factors critical analysis, based upon a repertoire of options. • Analyse epidemiology pertinent to PHEM presentations across the life-span, applying appropriate statistical interpretation of data. • Understand and apply the principles of clinical governance relevant to PHEM provision. • Acquire an enhanced awareness of collaborative inter-agency working applied in the context of the wider healthcare network. • Assimilate complex sources of information, to apply theoretical frameworks which formulate appropriate clinical decisions in the PHEM environment. 	2.5.3 2.5.6 2.6.9 2.9.1 2.11.2 B1.1 - B1.4 B2.1 - B2.5 B3.1 – B3.2 B4.1 – B4.4 B5.1 – B5.4 B6.1 – B6.5 B7.1 – B7.5 B8.1 – B8.5	Formative Assessment: (1) Practice Assessment Document Summative Assessment: (1) OSPE (2) 3000 word assignment

Pharmacology for PHEM	<ul style="list-style-type: none"> • Critically evaluate the pharmacology of therapeutic interventions applied to prescribing practice and/or medicines management in the PHEM environment. • Demonstrate knowledge and understanding of the legal and ethical framework surrounding prescribing and/or medicines management. • Apply comprehensive knowledge and understanding of pharmacology and clinical sciences to demonstrate safe and effective practice across the lifespan. • Meet relevant professional and regulatory standards which enable application and practice under relevant PHEM scope of practices. • Meet relevant professional and regulatory standards which enable application and practice under relevant PHEM scope of practices. • Meet relevant professional and regulatory standards which enable application and practice under relevant PHEM scope of practices. • Develop review and reflect upon current practice which enables the determination of skills, knowledge and attitudes to successfully and effectively autonomously administer pharmacological interventions. 	2.4.3 2.6.2 2.9.5 2.9.6 2.9.7 2.10.3 2.11.3 2.11.4 3.5	Formative Assessment: (1) Practice Assessment Document (2) Log book Summative Assessment: (1) Written examination (2) Extended case studies
------------------------------	---	--	---

Table 1: Module learning outcomes mapped to the national PHEM curriculum.

Programme structure

The Postgraduate Certificate (PgCert) is a 1 year part-time Masters level programme resulting in 60 FHEQ (Framework for Higher Education Qualifications) level 7 credits and a University of Cambridge Award. The content of the three modules maps to the national PHEM curriculum (Figure 2).

Year 1

Module 1: Advanced Clinical Assessment

Content: This module underpins the knowledge, skills and behaviours that enable a healthcare professional to assess a critically ill or injured patient in the pre-hospital environment. It includes:

- 1.1 Clinical method (history and examination techniques) as applied to the critically ill or injured patient of all ages.
- 1.2 Applied anatomy in relation to the most frequent acute presentations and emergency interventions for critically ill or injured patients of all ages.
- 1.3 Applied physiology in relation to the most frequent acute presentations and the effects of emergency treatment.

Approximate Teaching Hours: 72 hours pre-reading. 48 hours direct contact. 72 hours

directed study. 8 hours assessment.
<p>Assessment Methods:</p> <p>Formative Assessment:</p> <p>(1) Practice Assessment Document.</p> <p>(2) Log book of activity.</p> <p>Summative Assessment:</p> <p>(1) Objective structured practical examination (OSPE) of technical and non-technical skills – utilising part or whole task trainers or human simulators.</p> <p>(2) Written assessment of underpinning knowledge using single best answer format questions.</p>

Module 2: Clinical Leadership & Decision Making
<p>Content: This module focuses on the knowledge, skills and behaviours (non-technical skills) to enable a healthcare professional to operate as part of a pre-hospital critical care team and provide safe, effective care. It includes:</p> <p>2.1 Effective clinical decision making.</p> <p>2.2 Developing understanding of models of leadership.</p> <p>2.3 Team resource management.</p> <p>2.4 Applying evidence to clinical practice.</p> <p>2.5 Application of legal and ethical considerations.</p> <p>2.6 Appreciate the application of epidemiology in PHEM.</p>
Approximate Teaching Hours: 72 hours pre-reading. 48 hours direct contact. 72 hours directed study. 8 hours assessment.
<p>Assessment Methods:</p> <p>Formative Assessment:</p> <p>(1) Practice Assessment Document.</p> <p>(2) Log book of activity.</p> <p>Summative Assessment:</p> <p>(1) OSPE.</p> <p>(2) 3000 word written assignment.</p>

Module 3: Pharmacology & Therapeutics for PHEM
<p>Content: This module focuses on the knowledge, skills and behaviours to enable a healthcare professional to administer medicines and blood products for both organ and system support and to treat critically ill or injured patients of all ages. It includes:</p> <p>3.1 Applied pharmacology and therapeutics in PHEM.</p> <p>3.2 Law, ethics and risk assessment in relation to medicines & other therapeutic interventions.</p> <p>3.3 Use of devices for the administration of medicines & other therapeutic interventions.</p>
Approximate Teaching Hours: 72 hours pre-reading. 40 hours direct contact. 80 hours directed study. 8 hours assessment.
<p>Assessment Methods:</p> <p>Formative Assessment:</p> <p>(1) Practice Assessment Document.</p> <p>(2) Log book.</p> <p>Summative Assessment:</p> <p>(1) Written assessment.</p> <p>(2) Extended case studies – structured and detailed 750 – 1500 word case studies as used for the Faculty of Pre-hospital Care Accreditation Programme.</p>

Teaching methods

The programme combines rigorous academic development with clinical practice education opportunities and is underpinned by reflection and critical appraisal. Teaching sessions offer

a blended approach of theory and practice, synthesising academic development with clinical application. Interactive lectures, practical demonstrations and workshops, simulation and small group working are delivered and facilitated by subject matter experts.

Assessment methods

Continual formative assessment is provided through the use of: workplace based assessment tools developed by the Intercollegiate Board for Training in PHEM; reflective student blogs; case studies; completion of practice assessment documents; and the appraisal of student log books. Module specific summative assessment is achieved using a mixture of written assignments, OSPEs, and written examinations.

Management of teaching quality and standards

The University ensures high standards of teaching and learning in the following ways:

- The completion of Annual Quality Updates by each Faculty and Department, to enable central overview of provision and assist in dissemination of good practice
- Scrutiny of the reports of External Examiners for all teaching programmes
- Encouraging student engagement at both the local level, through involvement in Faculty and Departmental Committees, and at a central level by participation in the nationally-benchmarked surveys
- Holding reflective, centrally-coordinated, Learning and Teaching Reviews for all teaching institutions every six years to explore provision and suggest constructive courses of action
- Mentoring, appraisal, and peer review of staff, and encouraging staff participation in personal development programmes

Graduate employability and career destinations

Preparation for employment in general is provided in the opportunities for the acquisition of relevant transferable skills outlined in this programme specification. Where programmes with a significant vocational or professional element are accredited by Professional, Regulatory or Statutory Bodies details are given above.

The Careers Service maintains links with employers and takes their needs and opinions into account in the services which it provides for students. The Careers Service also allocates a Careers Adviser to each College, faculty and department to act as a point of contact.

Every effort has been made to ensure the accuracy of the information in this programme specification. At the time of publication, the programme specification has been approved by the relevant Faculty Board (or equivalent). Programme specifications are reviewed annually, however, during the course of the academical year, any approved changes to the programme will be communicated to enrolled students through email notification or publication in the Reporter. The relevant faculty or department will endeavour to update the programme specification accordingly, and prior to the start of the next academical year.

Further information about specifications and an archive of programme specifications for all awards of the University is available online at: <https://www.camdata.admin.cam.ac.uk/>