

Programme Specification

Master of Studies in Clinical Medicine

1	Awarding body	University of Cambridge
2	Teaching institution	University of Cambridge Institute of Continuing Education *
3	Accreditation details	None
4	Name of final award	Postgraduate Certificate (PGCert) Master of Studies (MSt)
5	Programme title	Postgraduate Certificate in Clinical Medicine MSt in Clinical Medicine (Intensive Care)
6	UCAS code	N/A
7	JACS code(s)	A300
8	Relevant QAA benchmark statement(s)	None
9	Qualifications framework level	FHEQ Level 7 (Masters), PGT
10	Date specification produced/last revised	March 2015
11	Date specification last reviewed	March 2015

^{*}Cognate Faculty endorsement provided by: School of Clinical Medicine



Introduction

Motivated by an independent review resulting in the 'Greenaway Report': The Shape of Training – Securing the future of excellent patient care, Health Education England's Education Outcomes Framework, and the Francis Inquiry Review Report, Cambridge University Health Partners (CUHP, the Academic Health Sciences Centre) have developed in conjunction with the University's Institute of Continuing Education (ICE), and the School of Clinical Medicine (SCM) this Clinical Medicine Fellowship Programme.

The Clinical Medicine Fellowship Programme complements advanced sub-speciality clinical training posts and comprises a modular Postgraduate Certificate in Clinical Medicine, a vocational CUHP-delivered 'HELMS Course' (Healthcare Education, Leadership and Management Scholarship), and a Master of Studies (MSt) in Clinical Medicine focussed on research. The HELMS Course is not part of a University of Cambridge award and therefore not described in this programme specification but an outline programme Specification is appended to the Business Case.

The Fellowship Programme is designed to be flexible and accessible to healthcare professionals, providing options for studying individual modules and progressing, as time permits, from one award to the next. The combined programme is designed to complement employment within Cambridge University Hospitals as a Clinical Fellow or Senior Clinical Fellow.

One clinical specialty is included initially within this Programme Specification: Intensive Care Medicine. The principle is, however, that the Fellowship Programme can be extended to include other specialties by building on the common platform provided by the Postgraduate Certificate in Clinical Medicine, the HELMS Course, and by adaptations of the components within the Masters award.

The HELMS Course, in particular, develops the relevant Royal College's assessment frameworks for the non-clinical components of training and broadens the scope of assessment to give equal weight to healthcare leadership and management, education, training, and organisational culture.

The objective of the Fellowship Programme is to enhance the specialist training of senior healthcare professionals in training and to broaden their understanding in healthcare education, research, leadership and management. It also fulfils the criteria set out in the Greenaway Report to evolve so-called new 'credentialed' programmes which provide subspecialty training in a variety of specialities.

Students in the context of this Fellowship Programme are likely to be in the final years of their training posts, or may have just completed their training and wish to further their subspecialist training.

Page 2 of 23

http://www.shapeoftraining.co.uk/reviewsofar/1788.asp

² http://hee.nhs.uk/work-programmes/education-outcomes/

 $[\]frac{3}{\text{http://www.kingsfund.org.uk/projects/francis-inquiry-report}}$

⁴ http://www.cuhp.org.uk



Programme structure:

1. Postgraduate Certificate in Clinical Medicine

The Postgraduate Certificate in Clinical Medicine is a one-year part-time M-level programme resulting in 60 FHEQ level-7 credits and the University of Cambridge award.

The Postgraduate Certificate in Clinical Medicine also forms a generic platform for further study during the HELMS Course and the Master of Studies in Clinical Medicine.

There are three modules with significant additional between-module reflection, study and assignment work. Each of the three modules is equally weighted providing 20 FHEQ-7 credits.

The modules are structured as follows:

Module 1: Clinical Research Module 2: Clinical Education Module 3: Clinical Leadership

It is expected that students will be admitted for the Postgraduate Certificate award to be completed over a 12-month period but the modules may in future be offered on a stand-alone basis. A student gaining all 60 FHEQ-7 credits from stand-alone modules within a 36-month period (from the start date of the first module studied to the submission date of the final summative assignment of third module) may be awarded the Postgraduate Certificate in Clinical Medicine.

Each taught module requires submission of work of 3000 words or equivalent.



PGCert Module 1: Clinical Research

This module consists of approximately 40 hours of face-to-face teaching hours, spread over the equivalent of five one-day sessions and covers 8 major themes:

Theme 1: Understanding the role of research in clinical practice and the role of clinicians in conducting research, and the elements of good clinical practice.

Theme 2: Understanding research methodologies.

Theme 3: Effective review of the literature.

Theme 4: Statistics, data analysis and data presentation.

Theme 5: The clinical study design process and ethical approval.

Theme 6: Funding applications and grant writing skills.

Theme 7: Publication, peer review and paper-writing.

Theme 8: Research career pathways.

Aims:

Contribute to continuing professional development of healthcare professionals through reinforcement of Good Clinical Practice (GCP).

Provide clinicians with the knowledge to understand the importance of research activity in the future of clinical care in the NHS and allow them to participate effectively in clinical research.

Provide clinicians with the knowledge and skills to appraise literature to inform clinical practice

Provide clinicians with the knowledge to engage successfully with research funding processes

Provide clinicians with the knowledge to ably engage with the publication process

Contribute to continuing professional development of healthcare professionals through developing skills allied to research-related processes

Contribute to continuing professional development of healthcare professionals by providing knowledge of career pathways

Delivery:



Didactic teaching (approximately 40 hours)

Good Clinical Practice course (approximately 8 hours)

Self-directed learning (approximately 180 hours which includes the completion of a reflective, personal electronic learning log; the completion of a theoretical project proposal).

Assessment:

Formative assessment occurs throughout the course by use of reflective logs, peer feedback, and tutor discussion.

Summative assessment is through a written assignment in the form of a theoretical project proposal for service development in an area of controversial or problematic clinical practice relevant to the student's own speciality. The project report must be 3000 words, or equivalent, in length.



PGCert Module 2: Clinical Education

The clinical education module provides a foundation in educational theory and practise and informs the development of teaching skills for the remainder of the combined ICE/CUHP programme. It covers the elements of educational theory and the application of those theories to the clinical environment.

Theme 1: Introduction to small group teaching.

Theme 2: Becoming an effective clinical supervisor.

Theme 3: Principles of assessment and appraisal.

Theme 4: Technology enhanced learning (TEL) Part I: eLearning

Theme 5: Technology enhanced learning (TEL) Part II: Simulation

Theme 6: Teaching practical clinical skills

Theme 7: Trainees in difficulty

Theme 8: Educational research

Aims:

Ensure the students gain skills and knowledge in the seven areas of the Academy of Medical Educators Framework.⁵

Contribute to continuing professional development of healthcare professionals by stimulating the skills to be a life long educator.

Develop high quality teachers and prepare them for self-appraising of the educational aspect of their work.

Develop motivation for teaching in the current environment of increasing pressure for efficiency and emerging health policy and infrastructure

Delivery:

The 8 themes are taught over 40 hours of face-to-face teaching 180 hours of self-directed learning, assignment work and reflection.

Assessment:

⁵www.medicaleducators.org/index.cfm/linkservid/180C46A6-B0E9-B09B-02599E43F9C2FDA9/showMeta/0/)



Students are assessed formatively throughout the course and reflective log following each session (200 words per taught session), as well as on their active participation during class sessions and workshops.

As part of their development and assessment students are expected to deliver peer-reviewed teaching during the module and summative assessment will use three written assignments which arise from this teaching. These should be examples from real life educational experiences the student has engaged in. For example, delivering clinical skills teaching, helping a trainee in difficulty, or designing an e-learning resource. The three assignments should total 3,000 words or the equivalent.



PGCert Module 3: Clinical Leadership

The clinical leadership module introduces the skills, knowledge and behaviours of effective clinician leaders. It designed to engender these skills in all students to allow them to become better balanced clinicians and to provide the foundations for further development of their non-clinical professional activity. These skills are developed during the HELMS Course.

The content of the module integrates NHS values and behaviours throughout, and draws on the NHS Healthcare Leadership Model domains⁶ developed by the NHS Leadership Academy. This module consists of approximately 40 hours of face-to-face teaching delivered over the equivalent of five days which includes a mix of didactic teaching, workshops, and small group discussion.

There are eight themes which are developed during the module and which complement similar themes in the HELMS Course:

Theme 1: Clinical leadership in the NHS.

Theme 2: Self-awareness and personal leadership qualities.

Theme 3: Project-management theories and practice.

Theme 4: The impact of effective leadership within the clinical arena and how to enhance leadership. Leadership resilience strategies.

Theme 5: Teams. An evidence-based approach to people management, and developing high-performing teams.

Theme 6: Rescuing failing teams, managing difficult behaviour.

Theme 7: Leading for improvement, strategic development, business planning and marketing.

Theme 8: Presenting projects, change management, organisational theory. Change within large organisations - the NHS, learning from other industries.

Aims:

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Develop healthcare leaders so that they have the required knowledge, skills and capability to have a positive personal impact on the work of others in their clinical team and wider service.

⁶ 'Healthcare Leadership Model – the nine dimensions of leadership behaviour', NHS Leadership Academy, 2014.



Contribute to the development of emotional intelligence, resilience and political astuteness required to be an effective healthcare leader in a rapidly changing and challenging environment.

Develop clinicians who are committed to safe and high-quality patient care.

Develop leaders who are confident in leading for improvement and leading across a wider system of healthcare.

Delivery:

The module is delivered through a mix of online resources and discussions, classroom sessions, group learning, simulations and self-directed learning (including pre-module reading, engagement in online discussion and completion of a reflective diary).

In addition to the academic underpinning, there is an emphasis on experiential learning throughout the module, estimated as approximately eight hours of student activity, including a mix of coaching, mentoring, shadowing, and service observation visits. The experiential learning process is captured through each student's reflective diary.

Assessment:

Students are assessed formatively throughout the module on evidence of regular reflection in their online reflective diary, demonstration of active participation in online discussion, and on their peer review of other students, both as the observer and as the learner, as evidenced in their written reflections.

A written assignment in the form of a completed business case or service improvement project report of 2,000 words or equivalent (66% of summative assessment).

A written assignment from the leadership simulation workshop of 1,000 words or equivalent (33% of assessment).



2. Master of Studies (MSt) in Clinical Medicine

The MSt in Clinical Medicine builds on, and subsumes, the Postgraduate Certificate and is complemented by the non-award-bearing CUHP HELMS Course. It is a part-time master's degree (FHEQ level-7) of the University of Cambridge.

The MSt in Clinical Medicine is studied in a clinical specialty, in this case in Intensive Care Medicine.

It is expected that students will be admitted for the MSt degree from the outset and study part-time over two years completing the Postgraduate Certificate modules in year one, the MSt taught components in year one and two, and focusing on the MSt clinical research project and associated dissertation in year two.

A student who has successfully completed the Postgraduate Certificate in Clinical Medicine who wishes then to complete the MSt is, if admitted (which would normally need to be within two years of completing the Postgraduate Certificate), required to complete the additional MSt component, i.e. the MSt taught components and the clinical research project within two years.

The MSt subsumes the Postgraduate Certificate; if a student holding the Postgraduate Certificate progresses to the MSt or returns to complete the MSt at a later date, then, on successful completion, the prior award of the Postgraduate Certificate is withdrawn in favour of the award of the MSt degree.

The MSt consists of three modules:

Module 1: Core subspecialty intensive care medicine. This is taught theme covering the subspecialty intensive care medicine. There is no summative assessment for this module.

Module 2: Preparation of three assignments on the three areas of intensive care medicine where Cambridge excels: neurosciences and trauma intensive care medicine, cardiothoracic intensive care medicine, transplant and general intensive care medicine. This is assessed by submission of three assignments of 2,000 words or equivalent each.

Module 3: A clinical research project which requires submission of a dissertation of 10,000 words or equivalent.



MSt Module 1: Core Subspecialty Intensive Care Medicine

This theme aims to focus on areas of tertiary centre intensive care medicine (ICM) in which Cambridge has world renowned expertise in addition to providing teaching and training on the diverse aspects of subspecialty ICM.

Teaching and assessment is arranged around a set of seven topics, outlined below. These topics form the core syllabus for the MSt. During Module 1 small group teaching takes place during the equivalent of six full-day sessions over the two years. Each session has an hour long tutorial on the core principles within each of the seven topics (7 hours of teaching per day). There is further web based and self-directed learning, which takes place in the clinical environment through experiential and peer learning and learning during the student's own time using on line and conventional resources provided by the faculty.

- 1. Trauma. Traumatic brain injury, massive haemorrhage, systemic manifestations of complex trauma, coagulopathy of trauma, trauma associated thoracic syndrome, resuscitation.
- 2. Neurosciences. Acute weakness, cerebrovascular pathology, Central Nervous System (CNS) infections, seizure disorders, acute psychotic episodes, recovery from neuro-critical illness.
- 3. Solid organ pathology and transplant. Congenital and acquired liver diseases, extra-corporeal renal and hepatic support, care of patients following transplant for liver, kidney, pancreas, and small bowel, renal failure, DKA, acute liver failure.
- 4. Cardio-respiratory. Haemodynamics in critical illness, mechanical cardiac and respiratory support, heart and lung transplant, ECMO retrieval, echocardiography, peri-operative care of cardiothoracic patients, care of patients undergoing T(A/M)VI, pulmonary hypertension, grown-up congenital heart disease.
- 5. Sepsis and haematology-oncology critical care. Resuscitation, diagnosis and management of sepsis, management of immunosuppressed patients, septic cardiomyopathy, septic encephalopathy, prognosis of critical illness during oncological treatment, care of patients following BMT, GVHD.
- 6. Pre-hospital. Transfer medicine and inter-specialty working. Organisation of pre-hospital and trauma networks, third-sector providers, stabilisation of trauma patients prior to transfer, communication systems, and major incident planning.
- 7. Pregnancy and childhood. Pre-eclampsia/eclampsia, HEELP, massive obstetric haemorrhage, acute fatty liver of pregnancy, GUCHD in pregnancy. Paediatric congenital cardiac disease, sepsis in childhood, respiratory diseases of childhood, DKA.



MSt Module 2: Intensive Care Medicine at Cambridge

In order to develop knowledge of areas where Cambridge has unique experience students develop further learning in a subset of three topics, these reflect the three intensive care units at Cambridge: Cardiothoracic Intensive care at Papworth (CICU), Neuro Critical Care Unit (NCCU), and John Farman Intensive Care Unit (JFICU).

This formal teaching and assessment is set, wholly, within small group supervision environments. Students prepare three assignments during the second year which may be in a variety of formats, for example, narrative review, e-poster, podcast, and blog post.

Supervisions are in groups. There are, at a minimum, two supervisions for each assignment. During the first supervision, the mentor and student outline the topic of interest and discuss this. This refines the topic and finalises the breadth of the topic to be studied. The students then have around ten weeks to prepare a report on the topic. During the second supervision the report is discussed with the group after being presented by the student.

Teaching and Learning

A mix of learning resources are provided. These include web resources collated within cambridgecriticalcare.net, study packs containing essential core literature and reading lists which overlaps with the learning resources provided for Module 1.

Assessment

Assessment of each of the three topic assignments consists of three components (*summative).

- 1. Assignment using a variety of techniques to present knowledge. The three topics must be prepared as a report (2,000 words or equivalent) in a format compatible with cambridgecriticalcare.net. Assistance is provided and the formats may include a podcast, a recorded visual presentation, or a written piece.*
- 2. Supervision. The ability of the student to present a complex topic and its clinical relevance to a small group will be assessed by the consultant mentor and will encompass critical and iconoclastic thinking, objectivity, and relevance to clinical practice*.
- 3. Reflective learning. The assignments are published on-line and discussed within the Cambridge and worldwide critical care community using the FOAMed⁷ network.

⁷ Free Open Access Medical Education – a network of educational resources hosted with in web 2.0 environment. A variety of tools will be used to encourage discussion of the student's work.



MSt Module 3: Research in Intensive Care Medicine

The clinical research project is conducted over two years, part time, with the majority being completed during the second year. This research must blend with research already being conducted within the critical care environments at Papworth Hospital, University of Cambridge and Cambridge University Hospitals NHS FT.

The dissertation provides an opportunity for students to research in depth an aspect of Intensive Care. Before to beginning the course, students will be provided with a list of potential projects and supervisors from the critical care environments within the University of Cambridge, Cambridge University Hospitals and Papworth Hospital. Students will then select a project during the first year following discussion with potential supervisors.

Each project must be assessed as appropriate by the Degree Committee of the Faculty of Clinical Medicine. Students have six formal supervisions during their research project during year two.

Whilst the project should be research based it does not, necessarily, have to be original empirical research. It could be possible for example, to produce a dissertation on the use of functional MRI to stratify brain injured patients while using the year to develop a subspecialty interest in cross sectional brain imaging.

Assessment will be based on the submission of a 10,000 word dissertation.



3. Programme Director and Administration

The Programme Director for the Clinical Medicine Fellowship Programme is:

Prof. Arun Gupta – Director of Postgraduate Education, Academic Health Sciences Centre, Cambridge University Health Partners, and Consultant in Anaesthesia and Neurocritical Care, CUHFT, and Associate Lecturer, Faculty of Clinical Medicine, University of Cambridge.

The Clinical Medicine (Intensive Care) programme is led by:

Dr Ronan O'Leary – Consultant in Neurosciences and Trauma Intensive Care Medicine, Cambridge University Hospitals.

The modules of the Postgraduate Certificate in Clinical Medicine are led by:

Clinical Education: Dr Silvia Karcheva – Consultant in Neuroanaesthesia, Cambridge University Hospitals.

Clinical Research: Dr Ari Ercole – Consultant in Neurosciences and Trauma Intensive Care Medicine, Cambridge University Hospitals.

Clinical Leadership: Ms Jessica Watts – Education Services Lead and Programme Director, Cambridge University Health Partners.

4. Examiners

Internal Examiner: to be appointed on approval by the Degree Committee of the Faculty of Clinical Medicine

Moderating External Examiner: to be appointed on approval by the Degree Committee of the Faculty of Clinical Medicine



5. Administration

The administration of the Clinical Medicine Programme will be fully supported by the Institute of Continuing Education, University of Cambridge, including all aspects of course administration, including liaison with examiners and guest lecturers, appointment of supervisors as part of the admissions process and ensuring adequate levels of supervision, receipt of regular supervision reports through CGSRS, registry function, oversight and validation, quality assurance and development, approval of admissions, approval of the Postgraduate Certificate and any exit qualifications and recommendations on final awards.

The Institute of Continuing Education will consult the Faculty of Clinical Medicine formally through a joint committee structure, typically an MSt Degree Sub-Committee with CUHP representatives within its membership, on matters including, but not necessarily limited to:

Admissions and oversight of academic standards Quality assurance Appointment of supervisors and external examiners Assignment and dissertation topics Appropriate access to Faculty activities and facilities.



Educational aims

The overall educational aims of the programme:

Provide professionally relevant teaching and learning informed by research in an integrated clinical and teaching environment.

Create a cohort of intensive care medicine consultants able to pursue and develop their roles in a rapidly-changing and challenging environment of clinical medicine.

Develop consultants with the confidence to lead service improvement for safe and high quality patient care, and with the required knowledge, skills and capability to have a positive personal impact on the work of others in their clinical team and wider service.

Develop consultants with an understanding of teaching, professional development and assessment in the field of clinical medicine.

Develop consultants with an understanding of research methodologies and ethical considerations relevant to clinical medicine.

Encourage students to develop as reflective practitioners with the emotional intelligence, resilience and astuteness required to be effective clinical leaders.

Encourage a commitment to intellectual challenge and evidence-based clinical practice informed by the latest conceptual and theoretical knowledge of medical education, research methods, ethics and clinical leadership and governance.



Learning Outcomes

The combined programme will permit students to develop:

The knowledge and critical understanding of recent developments in clinical medicine directly relevant to their future roles as tertiary centre consultants.

To develop students' knowledge and understanding of teaching and assessment strategies for complex concepts and themes informed by research in a rapidly-changing integrated clinical and teaching environment.

To enable deployment of new knowledge in their clinical practice and to have a positive personal impact on the work of others in their clinical team and wider service.

To develop students' knowledge of leadership models and their abilities and confidence as healthcare leaders of service improvement for safe and high quality patient care.

To update and extend students' understanding of research methodologies and ethical considerations.

Following successful completion of the Postgraduate Certificate students will have acquired:

Enhanced, consultant level skills as a leader of a clinical team able to implement service improvements effectively.

Exceptional presentation and project-management skills.

Advanced skills as a clinical teacher and assessor.

Tertiary centre consultant level critical skills to evaluate diverse research methodologies and sources of evidence and associated ethical considerations.

Enhanced abilities to influence and negotiate.

Enhanced personal resilience and reflectiveness.

Students who successfully complete the MSt in Clinical Medicine should have gained the skills and knowledge over and above those defined by Faculty of Intensive Care Medicine of the Joint Royal Colleges.

In addition, by the end of the MSt students should also have acquired:



The skills necessary to locate, read, interpret and analyse primary and secondary sources of material enabling the development of a conceptual and theoretical understanding of recent developments in their clinical specialty.

Skills to evaluate current scholarship and research critically in their own clinical specialty and to place this knowledge within the context of their own situation and practice as clinical leaders.

The ability to formulate a research topic relevant to their clinical context, to collect and analyse primary and/or secondary sources of data, and to undertake professionally relevant research.

The facility to communicate the results of their ideas, research and its conclusions in a written form acceptable as a work of scholarship potentially publishable in a professional or academic journal.



Teaching methods

Teaching methods will include a combination of interactive seminars, large and small group work with some emphasis on peer review and reflection on not only the content of what is being taught but also the process by which it is taught.

Throughout the program teaching will blend face-to-face delivery and online delivery, with syllabuses and reading lists given to students, online support between courses and feedback on assignments.

Formal didactic teaching is a small but important component of the teaching strategy used during the course.

Seminars, discussions and lectures led by a tutor with specialist knowledge in the content.

Guest lectures and seminars presented by leaders in the field.

Personal study guided by appropriate syllabuses, reading lists and resources provided by the Tutor.

Full and appropriate use of the programme's virtual learning environment and one-to-one supervisions provided both online and face-to-face.

For the MSt, advice on formulating a viable research question, topic and appropriate methodology and one-to-one supervisions on research related to formulating and conducting a project, structuring and writing a dissertation.



Assessment methods

Students are assessed *formatively* throughout the programme, in particular the Postgraduate Certificate, using a variety of techniques and interrelated strategies including evidence of regular reflection in their online reflective diary, demonstration of active participation in the programme will also be required. There is also a requirement for the students to take part in peer review of other students both as the observer and as the learner and then to provide a written reflection on that process.

For each of the three taught modules comprising the Postgraduate Certificate, students must complete *summative* assignments of 3000 words or equivalent.

For entry to the MSt from the Postgraduate Certificate, students must normally have successfully completed the Postgraduate Certificate with an average mark of at least 60%.

For students who do not complete the requirements for the MSt may be awarded a Postgraduate Certificate in Clinical Medicine as appropriate to reflect the elements of the programme successfully completed, provided this includes the three summative module assignments that comprise the Postgraduate Certificate.

For the MSt, students must submit 3 assessed pieces of work of 2,000 words (or equivalent) each and a research dissertation of 10,000 words or equivalent.

A dissertation awarded a mark of 58-59% is a borderline fail subject to a viva and/or corrections. Marks of 57% and below for the dissertation are absolute fails, with no re-submission possible.

Although the overall result of the MSt is pass or fail, the external examiners may recommend that a student with a mark of 75% or above (when aggregating the assignment and dissertation marks) may be deemed a Distinction.



Entry and/or progression requirements

As for all the University's MSt programmes, the Institute of Continuing Education's Registry is the approved Admitting Body and Administering Body; the ICE Registry also undertakes this role for the Postgraduate Certificate.

Applicants are normally expected to a hold a 2(i) degree or higher from a UK university or an equivalent from an overseas university.

Applications are invited from Specialty Registrars (ST6 or above) or equivalent, and newly appointed consultants.

Eligible employees from CUHP (Cambridge University Health Partners)⁸ partner organizations (CUHFT, Papworth Hospital NHS FT, CPFT), will be encouraged to apply, however places will also be made available to other suitably qualified individuals to complete the PGCert, the MSt is only available to employees of CUH and Papworth Hospitals.

All applicants are required to demonstrate competency in English at a high level before commencing the programme (IELTS Academic test scores of: overall band score of 7.5, with not less than 7.0 in speaking, listening, writing and reading). Evidence of competency in English is in accordance with the guidelines of the University of Cambridge. The language requirements will be reviewed in light of changes to the General Medical Council's English language requirements.

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⁸http://www.cuhp.org.uk/



Student Support

All MSt students are members of a College and have access to learning support from their College, the Institute of Continuing Education and the University's resources including those of the Faculty of Clinical Medicine, students have access to induction sessions in the University Library, a session introducing the University computing facilities, including the programme's VLE and the blog cambridgecriticalcare.net.

Teaching will be provided in a variety of environments which will include University of Cambridge colleges, within the Cambridge University Hospitals estate, and within the Faculty of Clinical Medicine of the University of Cambridge. Typically this will be small group environments.

Postgraduate Certificate students are not members of a College but have access to learning support from the Institute of Continuing Education and those of the Faculty of Clinical Medicine. The programme's VLE holds generic and subject specific learning resources. Students have borrowing rights in the University Library and can access the library's online resources. On request they may also have a letter of introduction for university or college libraries for the area in which they live.

The Programme Handbook provides comprehensive details of the programme, contact details and academic and general advice. Students are invited to attend lectures and events organised by the Faculty of Clinical Medicine and other relevant departments.

Graduate employability and career destinations

The majority of students will already be in full or part-time clinical employment and will take the course for reasons of professional and career development and advancement, for personal development, or to enhance their skills and knowledge.

Management of teaching quality and standards

The Institute of Continuing Education and the Faculty of Clinical Medicine participate in the University's quality assurance and enhancement system. Academic oversight of the MSt lies with the Degree Committee of the Faculty of Clinical Medicine, which may be facilitated through an MSt Degree Sub-Committee; direct academic management of the MSt is undertaken within the Institute of Continuing Education. The decisions of the MSt Degree Sub-Committee are reported to the Degree Committee of the Faculty and to the

Academic Policy and Operations Committee of the Institute of Continuing Education and examiners' reports are submitted to the Vice Chancellor of the University.

The teaching quality and standards of the Postgraduate Certificate will be monitored for coherency also by the MSt Degree Sub-Committee.

Examining of Assignments

The assignments are independently marked by two assessors. The Moderating External Examiner adjudicates on any significant discrepancies in marks. In line with University



practice s/he may request to see all essays or a sample, as well as those gaining a bare pass/fail and a distinction.

Examining of MSt Dissertations

MSt PGT programmes require an Internal Examiner and a Moderating External Examiner who adjudicate on any significant discrepancies in marks and also reviews all fail and potential high performance passes. The Moderating External Examiner may also be invited to participate in any viva voce examinations. The Moderating External Examiner submits a report to the Vice Chancellor, which is copied to the Faculty of Clinical Medicine Degree Committee and the Strategic Committee of the Institute of Continuing Education.

Student Evaluation

Opportunities are provided during each period of teaching to discuss progress and any problems. MSt students' progress is also monitored by their supervisor. Students are regularly asked to complete evaluation forms, which form the basis of annual reviews of the programme.

Quality indicators

The teaching quality and standards of the programme are monitored throughout by the MSt Degree Sub-Committee, the examiners and appropriate members of academic staff.

Links to further information

Further information for applicants is available at www.ice.cam.ac.uk

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:

www.admin.cam.ac.uk/univ/camdata/archive.html