

## CARDIOLOGY 2019/20 APPLICATION HANDBOOK



### Courses:

Postgraduate Certificate in Cardiology

Postgraduate Diploma in Cardiology

Master of Science in Cardiology

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## Introduction

The Postgraduate Certificate (PGCert), Postgraduate Diploma (PGDip) and Masters (MSc) in Cardiology are part of the Clinical Specialties Programme within Brighton and Sussex Medical School. The courses are designed for part-time or full-time study to meet the educational development needs of staff working in cardiology. Applications are open to a wide range of professionals including nurses, doctors, cardiac technicians, pharmacists and paramedical practitioners.

The course is designed as a multidisciplinary module framework and it is intended that students will share their occupational experiences, thereby enhancing multidisciplinary working and in doing so promote successful inter-professional practice.

## Aims and Learning Outcomes for the Course

### Aims

This course aims to provide advanced professional education for those working in the cardiology domain. The goal is to train the clinical leaders of the future by providing a blend of clinical knowledge with learning in three key professional domains: research; leadership; and communication and learning. The MSc will also develop students' research and publication skills.

The cardiology content of the programme provides comprehensive learning to meet the professional development needs of a wide range of practitioners working in cardiology including:

- Doctors
- Nurses
- Paramedics
- Perfusionists
- Pharmacists
- Physiologists
- Physiotherapists
- Radiographers

The course will increase students' practical and theoretical knowledge of advanced clinical and interventional cardiology by promoting exploration of the current evidence for diagnosis and treatment. Students are enabled to use this evidence toward good practice through a focus on the practical aspects of the care of common cardiac conditions from a medical and patient perspective. In addition, the course aims to promote a wider understanding of the differing profiles and contributory roles of the various health care professionals involved in the care of cardiac patients.

## Learning Outcomes

On successful completion of the programme students will be able to demonstrate:

- A systematic and advanced knowledge of the structure and function of the heart in health and disease;
- A comprehensive understanding of the principles underlying the electrocardiogram and of the interpretation of cardiac rhythms and heart muscle damage, applying this to inform and advance clinical practice;
- A systematic and advanced knowledge of the manifestations and diagnosis of a range of cardiac conditions;
- A critical awareness of the benefits versus the risks of evidence-based treatments for cardiac conditions;
- A systematic understanding of the techniques, indications, value, interpretation and risks of a range of cardiovascular investigations relevant to their practice;
- An understanding of research methods and critical appraisal and the ability to use evidence appropriately to inform clinical practice;
- The ability to analyse and synthesise data from a wide variety of sources to inform evidence-based practice;
- The ability to research and report on issues using literature searching and empirical research skills;
- An understanding of the organisational and policy context and the drivers for change to enable clinicians to contribute more effectively to improving the design, delivery, outcomes and cost effectiveness of services;
- An advanced level of understanding of communication and teaching in relation to patients and colleagues of all levels;
- Professional writing and presentation skills.

## Entry Requirements

The course is aimed at professionals who are in a position to deliver improvements to the health and care of people in the cardiology domain.

The programme is open to post-registration doctors and qualified practitioners in any profession allied to medicine. Those with a first degree will have a minimum of 2 years clinical practice; those without will have a minimum of 5 years post-qualification practice in cardiology. Students who do not hold a first degree will initially register for either a Postgraduate Certificate or a Postgraduate Diploma award.

Applicants may be interviewed. They will be expected to be aware of the latest trends and developments in cardiology and show that they have had regular contact with key cardiology journals as well as high calibre journals specific to their own profession.

All applications will be subject to the University Equal Opportunities Policy. Applications are welcomed from International Students with appropriate qualifications and experience. Students for whom English is not a first language must demonstrate an acceptable standard of comprehension and communication in the English Language. Our minimum IELTS score is 7.0, with no less than 6.5 in each section.

**There will be an Induction Day on Thursday 12 September 2019 for all successful applicants and you are strongly recommended to attend.**

## Course Structure

The academic standard is the same for each of the three awards (PGCert, PGDip and MSc) as they are all taught at Postgraduate (M) level. The difference lies in the number of modules taken and, for the MSc, the completion of a dissertation. Successful completion of the PGCert, PGDip, and MSc requires 60, 120 and 180 credits respectively. (One standard module is worth 20 credits.)

PGCert students are required to undertake MDM135 and MDM136, and either MDM137 Invasive and Interventional Cardiology or MDM10 Research Methods and Critical Appraisal.

PGDip students are required to undertake the three Cardiology content modules and three professional studies modules (MDM10, MDM122, and **either** MDM110 **or** MDM76).

MSc students are required to undertake the three Cardiology content modules and three professional studies modules. In addition, students are required to undertake a 60 credit dissertation module, culminating in the submission of a 12,000 word dissertation and a research poster.

If you have previously studied similar content to that covered in the modules for your course, it may be possible you to claim credit for your previous learning via our Recognition of Prior Learning (RPL) process. Please contact the Programme Administrator or the Course Leader if you think this may apply to you.

### Postgraduate Certificate in Cardiology (60 credits)

Three modules:	Status
MDM135 Acute Cardiology Principles & Practice	Mandatory (20 credits)
MDM136 Fundamentals of Cardiac Procedures & Investigations	Mandatory (20 credits)
<b>PLUS EITHER</b>	
MDM137 Interventional Cardiology & Cardiac Surgery	Optional (20 credits)
<b>OR</b>	
MDM10 Research Methods and Critical Appraisal	Optional (20 credits)

### Postgraduate Diploma in Cardiology (120 credits)

Six modules:	Status
MDM135 Acute Cardiology Principles and Practice	Mandatory (20 credits)
MDM136 Fundamentals of Cardiac Diagnostic Procedures & Investigations	Mandatory (20 credits)
MDM137 Invasive and Interventional Cardiology	Mandatory (20 credits)
MDM10 Research Methods and Critical Appraisal	Mandatory (20 credits)
MDM122 Communication, Learning and Teaching in Health & Social Care	Mandatory (20 credits)
<b>PLUS EITHER</b>	
MDM110 Leadership and Change Management in Clinical Services	Optional (20 credits)
<b>OR</b>	
MDM76 Quality, Safety and Service Improvement in Clinical Services	Optional (20 credits)

## Master of Science in Cardiology (180 credits)

Six modules + Dissertation Module:	Status
MDM135 Acute Cardiology Principles and Practice	Mandatory (20 credits)
MDM136 Fundamentals of Cardiac Diagnostic Procedures & Investigations	Mandatory (20 credits)
MDM137 Invasive and Interventional Cardiology	Mandatory (20 credits)
MDM10 Research Methods and Critical Appraisal	Mandatory (20 credits)
MDM122 Communication, Learning and Teaching in Health & Social Care	Mandatory (20 credits)
<b>PLUS EITHER</b>	
MDM110 Leadership and Change Management in Clinical Services	Optional (20 credits)
<b>OR</b>	
MDM76 Quality, Safety and Service Improvement in Clinical Services	Optional (20 credits)
<b>PLUS</b>	
MDM164 Dissertation	Mandatory (60 credits)

## Module Descriptions

### Acute Cardiology Principles & Practice (MDM135)

This module provides a basic introduction to coronary and structural heart disease and the principles and practice of acute medical treatment. The module aims to advance students' knowledge of the basics of coronary and structural heart disease and the principles that underpin treatment and prevention. Emphasis is placed on promoting critical awareness, understanding and application of the current evidence for diagnosis and treatment of acute cardiac conditions in the hospital setting. Students will also gain a wider understanding of the differing profiles and contributory roles of the various health care professionals and the impact of cardiovascular illness upon the individual.

### Fundamentals of Cardiac Diagnostic Procedures & Investigations (MDM136)

This module provides a basis for the student to develop a systematic and comprehensive understanding of, and skills in, cardiac investigations and diagnostic procedures. Students are provided with the fundamental skills for understanding, interpreting and commissioning basic and complex diagnostic cardiac investigations.

## **Invasive & Interventional Cardiology (MDM137)**

This module provides a basis for the student to develop a systematic and comprehensive understanding of, and skills in, the care and management of patients requiring invasive management of their cardiac condition. Topics covered include percutaneous interventions and coronary artery and valve surgery, the assessment of patients undergoing non-cardiac operations and the management of haemodynamic instability. Building on the knowledge gained in the previous cardiology modules, the module will develop students' theoretical knowledge of invasive cardiology and cardiac surgery by promoting critical awareness, understanding and application of the current evidence base. A secondary aim is to promote a wider understanding of the differing profiles and contributory roles of the various health care professionals involved in the interventional care of cardiac patients.

## **Research Methods and Critical Appraisal (MDM10)**

The module aims to provide students with an understanding of how to use evidence in their specialist area. It aims to provide students with an understanding of research methods in health and social care and the ability to relate appropriate methods to research questions. Students will be equipped to search and critically review the literature, to develop and justify a research proposal, and to anticipate potential ethical issues in their research proposals.

## **Leadership and Change Management in Clinical Services (MDM110)**

This module aims to provide an overarching understanding of the organisational context for change in health and care service settings to enable managers, practitioners and professionals to contribute more effectively to leading and improving the design of service models and new organisational bodies, and to the delivery, cost effectiveness and outcomes of services.

## **Quality, Safety and Service Improvement in Clinical Services (MDM76)**

This module aims to enable students to gain a rigorous and comprehensive academic understanding of the theory, principles and practice of quality in care and treatment, including safeguarding and patient safety, with an emphasis on health and care services in the UK.

## **Communication, Learning and Teaching in Health and Social Care (MDM122)**

This module aims to facilitate the development of practitioners as communicators and educators, promoting the development of knowledge, skills, attitudes and practices of a competent clinical practitioner.

## **MDM164 Dissertation**

The Dissertation is an opportunity for students to research, in depth, a topic of their own choosing in Cardiology.

The initial preparation for the dissertation begins in the Research Methods and Critical Appraisal module, where students will develop a research proposal. Students will also attend a Dissertation Day to help

prepare them in the development of their Dissertation Proposal submission. This aims to assist them in clarifying their research question and matching methods; to identify any ethical issues to be addressed and any approvals which may be required; and to assist them in the completion of the application form.

We also run regular additional workshops covering specific aspects of research methods, including interviewing, focus groups, data analysis, systematic reviews, obtaining informed consent. These provide practical skills training to equip students for the conduct of their research project.

## Timetable

A complete list of the modules and the dates they are scheduled to run will be available from June. Please contact the Programme Administrator for further information.

## Fees

Fee information is available on the Cardiology course page at:  
<https://www.bsms.ac.uk/postgraduate/taught-degrees/cardiology.aspx#h7>.

For any enquiries, please contact [fees@brighton.ac.uk](mailto:fees@brighton.ac.uk). More information is available via the University of Brighton website at: <https://www.brighton.ac.uk/current-students/my-finances/index.aspx>

## Teaching Staff

Teaching on our postgraduate modules is delivered by academic staff from Brighton and Sussex Medical School and from other departments in the Universities of Brighton and Sussex.

Specialist teaching on our Cardiology modules is provided by consultants, specialists and other clinical staff based in Trusts and organisations in and around the region. The extensive contribution of expert practitioners to the teaching of our modules is a distinctive feature of courses at Brighton and Sussex Medical School.

## Teaching and Learning Methods

Teaching methods encompass lectures, whole group discussions, small group discussions, critical appraisal workshops and individual tutorials. As with all Masters courses, there is a considerable degree of independent study. For part-time students, maintaining employment throughout the course ensures the transfer of knowledge and skills from the course into the workplace.

## Assessment

Most modules require an in-depth evaluation of a topic chosen by the student and agreed with the module leader.

For **all Cardiology content modules** (MDM135, MDM136 and MDM137), the assessment is made up of two components: a 2,000-3,000 word assignment and a 90 minute written examination (weighted equally). Both components must be passed to pass each module.

For **MDM10** and **MDM110**, the assessment is a 3,000 word written assignment.

For **MDM122**, students will be required to plan and deliver a 15-minute learning session, which will be recorded. This session will form the basis of a 2,500 word critical analysis and reflection.

For **MDM76**: the assessment is an assessed student presentation, based in an applied quality or safety improvement project.

For the **MDM164** Dissertation, the assessment is made up of two components: a 12,000 word dissertation (worth 80% of the total marks), and a research poster (worth 20% of the total marks). Both components must be passed.

## How to Apply

Please apply online via the following link: <http://www.bsms.ac.uk/postgraduate/apply-now>

If you have any further questions please contact the Programme Administrator via the email address on the cover page.