MSc Internal Medicine

APPLICATION HANDBOOK 2023/24

Courses:
Postgraduate Certificate in Internal Medicine
Postgraduate Diploma in Internal Medicine
Master of Science in Internal Medicine

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Introduction

The Postgraduate Certificate (PGCert), Diploma (PGDip) and Masters (MSc) in Internal Medicine have been developed as part of the Clinical Specialties Programme within Brighton and Sussex Medical School and are jointly validated by the University of Brighton and the University of Sussex. The courses are designed for part-time or full-time study to meet the educational needs of Medical Trainees interested in a career in Internal Medicine.*

The course has been designed to take into account the professional and academic development of senior Internal Medicine specialists and to provide a rounded education which includes current advances in medical sciences and their application in clinical practice. This increased scientific awareness of pathophysiological processes will prepare Medical Trainees for advanced practice and senior clinical posts in the future.

*International Students on a Tier 4 Visa are only able to apply for a FT MSc

Aims and Learning Outcomes for the Course

Aims

The aims of the course are:

- To provide Medical Trainees with advanced education in order to equip them to be capable, informed and creative consultants of the future.
- To provide learning and insights into advanced professional practice in Medicine – many of which are not normally included in standard Medical Training.
- To prepare Medical Trainees to be research aware and research active.

Learning Outcomes

Postgraduate Certificate (PG Cert) and Postgraduate Diploma (PG Dip):

Upon successful completion of the programme, you will be able to:

1. Demonstrate an advanced understanding of “intensive medicine”, including both the pathophysiology of common conditions which result in severe life-threatening illness, and the modern management of these problems; along with a systematic understanding of intensive care medicine and the pathophysiology underlying severe illness (MDM168)
2. Demonstrate an in-depth advanced understanding of the principles of autoimmune processes and their application across various medical specialties in clinical practice (MDM166)

3. Demonstrate an advanced, in-depth awareness and understanding of infection and be able to provide appropriate solutions or actions to deal with those (MDM167)

4. Introduce students to the emerging concept of “Frailty”, to give them a comprehensive, contemporary understanding of how it is defined, measured and how it is used in research and clinical practice (MDM169)

5. Achieve an advanced and systematic level of understanding of Maternal Medicine, including pathology, physiology, and practical applications in the context of Internal Medicine when considering the pregnant patient (MDM189)

6. Demonstrate a comprehensive understanding of research methods and critical appraisal (MDM10)

7. Evidence a critical 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 (MDM110)

8. Display an advanced level of understanding of communication and teaching in relation to patients and colleagues of all levels (MDM122)

9. Analyse and synthesise data from a wide variety of sources to inform evidence-based practice in Internal Medicine (All modules)

**Masters (MSc):**
Upon successful completion of the PGDip programme, in addition to the above students will be able to:

1. Identify a research question, plan, conduct and report/publish a research project in their chosen area of Internal Medicine.

**Entry Requirements**
This course will be open to doctors who have completed foundation training (or equivalent) and have completed at least part one of the Membership of the Royal College of Physicians (UK) examination – or equivalent post-graduate professional qualification. Applications will also be considered from those that have an equivalent level of experience and qualification.

Applications for single module study of Internal Medicine clinical modules may be considered from allied health professionals with appropriate academic and clinical experience (see individual module handbooks for more details).
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 (IELTS: minimum overall score of 7.0 and 7.0 for the writing element).

Where necessary, applicants may enrol in an English Pre-sessional course which takes place before admission to the MSc Course.

Claims for the Recognition of Prior Learning (RPL) will be considered.

The BSMS Postgraduate Induction Day will take place remotely on September 19th 2023*, for all successful applicants and you are strongly recommended to attend.

*The date & location are subject to change

**Please note International Students on Tier 4 visas can only take a Full Time MSc.**

**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/7) level. The difference lies in the number of modules taken and for the MSc, the completion of a dissertation. One module is worth 20 credits and the Dissertation is worth 60 credits). Successful completion of the Certificate, Diploma and MSc require 60, 120 and 180 credits respectively.

To achieve the **PGCert Internal Medicine award**, students are required to complete 3 modules in total:

Either **three of the five Internal Medicine Core clinical modules**:

- Autoimmunity (MDM166)
- Infectious Diseases (MDM167)
- Intensive Medicine (MDM168)
- Frailty & Elderly Medicine (MDM169)
- Maternal Medicine (MDM189)

Or two Internal Medicine Core clinical modules and one of the three professional modules:

- Research Methods & Critical Appraisal (MDM10)
- Leadership and Change Management in Clinical Services (MDM110)
• Communication, Learning and Teaching in Health and Social Care (MDM122)

To achieve the PG Dip Internal Medicine award, students are required to complete 6 modules in total:

Three or four of the five Internal Medicine Core clinical modules:

• Autoimmunity (MDM166)
• Infectious Diseases (MDM167)
• Intensive Medicine (MDM168)
• Frailty & Elderly Medicine (MDM169)
• Maternal Medicine (MDM189)

And two or three of the three Core professional modules, which must include MDM10:

• Research Methods & Critical Appraisal (MDM10)
• Leadership and Change Management in Clinical Services (MDM110)
• Communication, Learning and Teaching in Health and Social Care (MDM122)

MSc students are required to undertake three or four Internal Medicine content modules and two or three professional content modules. In addition, students are required to undertake a 60-credit dissertation module, culminating in a 12,000 word dissertation with poster.

Postgraduate Certificate Internal Medicine (60 credits):

<table>
<thead>
<tr>
<th>Module</th>
<th>Status</th>
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<tbody>
<tr>
<td>Three of the five Core Clinical Modules:</td>
<td></td>
</tr>
<tr>
<td>MDM166 Auto-Immunity</td>
<td>20 credits (optional)</td>
</tr>
<tr>
<td>MDM167 Infectious Diseases</td>
<td>20 credits (optional)</td>
</tr>
<tr>
<td>MDM168 Intensive Medicine</td>
<td>20 credits (optional)</td>
</tr>
<tr>
<td>MDM169 Frailty and Elderly Medicine</td>
<td>20 credits (optional)</td>
</tr>
<tr>
<td>MDM189 Maternal Medicine</td>
<td>20 credits (optional)</td>
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<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>Two Core Clinical Modules and one of:</td>
<td>20 credits (optional)</td>
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<tr>
<td>Module</td>
<td>Status</td>
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<td>MDM168 Intensive Medicine</td>
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</tr>
<tr>
<td>MDM169 Frailty and Elderly Medicine</td>
<td>20 credits (optional)</td>
</tr>
<tr>
<td>MDM189 Maternal Medicine</td>
<td>20 credits (optional)</td>
</tr>
<tr>
<td>PLUS</td>
<td></td>
</tr>
<tr>
<td>MDM10 Research Methods &amp; Critical Appraisal</td>
<td>20 credits (compulsory)</td>
</tr>
<tr>
<td>PLUS at least ONE of these two Core Professional Modules:</td>
<td></td>
</tr>
<tr>
<td>MDM110 Leadership and Change Management in Clinical Services</td>
<td>20 credits (optional)</td>
</tr>
<tr>
<td>MDM122 Communication, Learning &amp; Teaching in Health &amp; Social Care</td>
<td>20 credits (optional)</td>
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**Masters in Internal Medicine (180 credits)**
### Three or four of the five Core Clinical Modules:

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Module Name</th>
<th>Credits (Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM166</td>
<td>Auto-Immunity</td>
<td>20 credits</td>
</tr>
<tr>
<td>MDM167</td>
<td>Infectious Diseases</td>
<td>20 credits</td>
</tr>
<tr>
<td>MDM168</td>
<td>Intensive Medicine</td>
<td>20 credits</td>
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<tr>
<td>MDM169</td>
<td>Frailty and Elderly Medicine</td>
<td>20 credits</td>
</tr>
<tr>
<td>MDM189</td>
<td>Maternal Medicine</td>
<td>20 credits</td>
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### PLUS

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<tr>
<th>Module Code</th>
<th>Module Name</th>
<th>Credits (Compulsory)</th>
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</thead>
<tbody>
<tr>
<td>MDM10</td>
<td>Research Methods &amp; Critical Appraisal</td>
<td>20 credits</td>
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</table>

### PLUS at least ONE of these two Core Professional Modules:

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Module Name</th>
<th>Credits (Optional)</th>
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<tbody>
<tr>
<td>MDM110</td>
<td>Leadership and Change Management in Clinical Services</td>
<td>20 credits</td>
</tr>
<tr>
<td>MDM122</td>
<td>Communication, Learning &amp; Teaching in Health &amp; Social Care</td>
<td>20 credits</td>
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### PLUS

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<tr>
<th>Module Code</th>
<th>Module Name</th>
<th>Credits (Compulsory)</th>
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<tbody>
<tr>
<td>MDM164</td>
<td>Dissertation</td>
<td>60 credits</td>
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### Module Descriptions

**Autoimmunity (MDM166)**

The module aims to achieve an advanced level of understanding of auto-immunity at a molecular level and apply this systematically to a wide variety of diseases across several medical specialties (for example respiratory medicine, as above). It will explore the rationale underpinning different therapeutic strategies, including the use of biologic agents. The module will develop students' critical reasoning to a high level through case analysis incorporating both individual student presentation and group problem solving.
The Module content will include:

- Vasculitis masterclass
- Scleroderma symposium
- Biologic therapy in Inflammatory bowel disease
- Autoimmune liver disease
- Inflammation and autoimmunity in the lung
- Diabetes: pathophysiology and immunomodulatory therapies
- Biologics and cell-based immunotherapies in Haemato-oncology
- Vasculitis and the kidney
- Autoimmune conditions in dermatology
- Autoimmunity v. autoinflammation
- Complex case analysis

Infectious Diseases and HIV (MDM167)

This module aims to introduce students to Infectious Diseases and HIV Medicine, building on their previous learning and clinical experience. Pathology, diagnostic issues and clinical practice, both in the West and resource-poor communities are included in the module.
**Intensive Medicine (MDM168)**
This module focuses on “Intensive Care Medicine”, exploring both the pathophysiology of common conditions which result in severe life-threatening illness, and the modern management of these problems. The module will pay specific attention to what is different about treating illness in an Intensive Care setting and, on the wards and focus on ethical aspects of treatment. Simulation of various scenarios will explore the team-working, leadership and technical and organisational skills needed to work in an Intensive Care environment.

**The Module content will include:**
- Scoring systems to assess disease severity in intensive care
- Models of service delivery
- Pathophysiological mechanisms in shock
- Search methodology in intensive medicine
- The ethics of intensive care
- Management of acute organ dysfunction
- Assessment and management of the failure of individual organ systems
- Identification of the additional treatments, and their possible benefit, for disease usually treated at ward level

**Frailty and Elderly Medicine (MDM169)**
This module aims to introduce students to the emerging concept of “Frailty”, to give them a thorough, contemporary understanding of how it is defined, measured and how it is used in research and clinical practice.

**The module content will include:**
- Molecular epidemiology
- Cellular and physiological mechanisms in sepsis
- Effective use of modern diagnostic techniques
- Principles and practice of infection control
- Therapeutic interventions (medical and non-medical)
- Medical and psychosocial aspects of HIV Medicine
The module content will include:

- Models of frailty and how it is conceptualised
- Assessments of frailty
- Clinical applications
- Clinical pathways and decision-making
- Therapeutic interventions (medical and non-medical)
- Research issues and priorities.

Maternal Medicine (MDM189)
The aim of the module is to attain a deep and systematic understanding of maternal medicine including the pathology, physiology, and practical applications of this specialised field and its interrelationship with all other specialties in Internal Medicine. The impact of pregnancy on the management of common medical problems will be evaluated whilst simultaneously considering the consequence to the mother and fetus. It will compare different diagnostic and therapeutic strategies used in pregnancy and the rationale that underpins them. The module will develop students’ critical reasoning to a high level through case analysis incorporating both individual student presentations and group problem solving.

The module content will include:

- Maternal Mortality and morbidity
- Investigations in pregnancy, including imaging
- The collapsed patient on acute take
- Management of strokes, TIAs and epilepsy
- Hypertension and renal disease
- Diabetes and common endocrine problems in pregnancy
- Haematological emergencies: HELLP/ microangiopathic haemolytic anaemia/ TTP/HUS
- Gastrointestinal and liver diseases
- Rheumatological/ autoimmune diseases
- Infectious Diseases (HIV, hepatitis)
- Prescribing in pregnancy and during breastfeeding
- Perinatal mental health and management

Research Methods and Critical Appraisal (MDM10)
The module aims to provide students with an understanding of how conduct and appraise research in their specialist areas. 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 proposal. Attendance at the Obtaining Informed Consent Workshop is a mandatory part of the module.

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

This module aims to provide an overarching understanding of the organisational context for change in health & 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.

**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 Internal Medicine. The initial preparation for this begins in the Research Methods & Critical Appraisal module, where students will develop a research proposal. Students 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. Additional workshops are laid on regularly in specific aspects of research methods – e.g. interviewing, focus groups, data analysis, systematic reviews, obtaining informed consent, etc. – in order to provide practical skills training to equip students for the conduct of their research project.

**Timetable**

Please see the timetable below for dates of modules. Clinical Modules are run once each academic year, Professional Modules are run several times each year.

<table>
<thead>
<tr>
<th>Module</th>
<th>Dates</th>
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<tbody>
<tr>
<td>MDM166 (Clinical Module)</td>
<td>March 11&lt;sup&gt;th&lt;/sup&gt; -15&lt;sup&gt;th&lt;/sup&gt; 2024</td>
</tr>
<tr>
<td>MDM167 (Clinical Module)</td>
<td>May 13&lt;sup&gt;th&lt;/sup&gt; – 17&lt;sup&gt;th&lt;/sup&gt; 2024</td>
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<tr>
<td>Module Code</td>
<td>Course Type</td>
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<tr>
<td>MDM168</td>
<td>Clinical Module</td>
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<td>Clinical Module</td>
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<tr>
<td>MDM189</td>
<td>Clinical Module</td>
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</table>
| MDM10       | Professional Module * | October 2023
|             |              | November 2023
|             |              | January 2024
|             |              | April 2024
|             |              | May 2024 |
| MDM110      | Professional Module ** | October & November 2023
|             |              | March & April 2024
|             |              | July 2024 |
| MDM122      | Professional Module ** | October 2023
|             |              | January 2024
|             |              | April & May 2024 |

*4 days on University of Brighton Falmer Campus & 1 day Online. Spaces are not guaranteed and students may be placed on a waitlist until spaces become available. FT students will take priority for earlier occurrences.

** Blended learning style

Since Covid-19 teaching has become conducted via blended learning, MS Teams and face to face. Student contact hours remain the same as outlined in the module specification, with attendance to be no less than 80%.

The dates provided are subject to change. A complete set of dates will become available once confirmed via BSMS’ Postgraduate website later in the year, for more information please contact your course Co-Ordinator listed on the cover of this application handbook.

The University reserves the right to cancel modules for any reason it deems sufficient and to alter programmes without notice. In the event of such cancellations, the full fee will normally be refunded.

If you have any queries about module dates or module choices, please do not hesitate to contact the Course Co-Ordinator for further information.

**Fees**

For fee enquiries please contact fees@brighton.ac.uk or telephone: 01273 642449.
Teaching Staff

Academic staff from Brighton and Sussex Medical School and other faculties in the Universities of Brighton and Sussex are involved in the provision of teaching in a modular format, at Masters level. Specialist teaching is provided by consultants, specialists and other clinical staff from Trusts and organisations in and around the region. The extensive contribution of expert practitioners to the teaching of the 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, individual project work, simulations and individual tutorials.

Maintaining employment throughout the course ensures the transfer of knowledge and skills from the course into the workplace.

As with all Masters courses, there is a considerable degree of independent study. Classroom based learning will constitute approximately 20% of total learning hours with the remaining 80% hours made up of independent learning.

Assessment

MDM166 Auto-Immunity
A 1,500-case report followed by a viva style case-based discussion on this case report.

MDM167 Infectious Diseases
A 3,000-word essay with a choice of title that is supported by reference to research evidence and up-to-date literature and a poster submission.

MDM168 Intensive Medicine
A 3,000-word essay demonstrating (by reference to their clinical practice) how their knowledge gained in the module has contributed to the student’s understanding of intensive medical care

MDM169 Frailty and Elderly Medicine
A 3,000-word applied written assignment demonstrating application of evidence-based frailty pathway to the student’s area of clinical practice.
MDM189 Maternal Medicine
A 1,500-case report followed by a viva style case-based discussion on this case report.

MDM10 Research Methods & Critical Appraisal
A 3,000-word assignment

MDM110 Leadership and Change Management in Clinical Services
3,000 word critically reflective assignment on an aspect of Leading and Transforming services.

MDM122 Communication, Learning & Teaching in Health & Social Care
A 15-minute learning session which will be recorded and uploaded onto a web-sharing site. This recorded session then forms the basis of a 2,500-word critical analysis and reflection of this communication, teaching and learning session.

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).

How to Apply
Please apply online via the following link: http://www.bsms.ac.uk/postgraduate/apply-now
Please note International students on Tier 4 visas can only take a Full Time MSc.

If you have any further questions please contact the Course Co-Ordinator via the email address on the cover page.