

Programme Title: MSc Cancer & Therapeutics



## Programme Specification

Awarding Body/Institution	Queen Mary, University of London
Teaching Institution	Queen Mary, University of London
Name of Final Award and Programme Title	MSc Cancer & Therapeutics
Name of Interim Award(s)	PGDip Cancer & Therapeutics
Duration of Study / Period of Registration	FT 1year, PT 2 years (PT study can be extended to 5 years with approval)
QM Programme Code / UCAS Code(s)	A4VB (FT)/ A4VF (PT)/ A4V9 (DL FT)/ A4VD (DL PT)
QAA Benchmark Group	Medicine
FHEQ Level of Award	Level 7
Programme Accredited by	
Date Programme Specification Approved	Feb 2016 (For Sept 2016 Start)
Responsible School / Institute	Barts Cancer Institute

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

Wolfson Institute of Preventive Medicine

Institution(s) other than Queen Mary that will provide some teaching for the programme

Institute of Cancer Research London, University College London

### Programme Outline

General:

This programme is provided by the Barts Cancer Institute (BCI) within Barts and the London School of Medicine.

The Barts Cancer Institute is a Cancer Research UK Centre of Excellence, which forms part of a national framework to deliver world-leading research, improved patient care and greater public engagement.

We have a constellation of leading cancer scientists and clinicians involved in basic, translational and clinical research. This expertise allows us to offer you this exciting opportunity to study on the MSc/PG Diploma in Cancer and Therapeutics.

Cancer is the cause of over 25% of all deaths in the UK. Despite major advances in treatment over the last 25 years, over half of the 270,000 new cancer cases registered in the UK each year will go on to die of their disease. New treatment options are clearly required, a process that will require staff at all levels of the development process to be appropriately trained and skilled in cancer therapeutics and new treatment development.

This course is designed to give you a detailed and thorough understanding of cancer therapeutics, based on knowledge of

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cancer biology, pathology and research methodology. This will provide you with a good grounding in the use and evaluation of cancer therapies which will enhance your career prospects in many areas of early phase clinical trials and clinical drug development in the cancer setting.

This programme is offered in the following modes of study:

- Onsite - 1 year full time
- Onsite - 2 years part time

Delivered onsite through lectures, seminars and practicals

- Distance Learning - 1 year full time
- Distance Learning - 2 years part time

Delivered through our virtual learning environment using lecture capture videos and interactive skype sessions.

This programme offers the following awards:

- MSc: 180 credits consisting of 120 credits of taught units and a 60 credit Dissertation
- Postgraduate Diploma: 120 credits of taught units

All teaching is delivered by research active scientists and clinicians.

### Aims of the Programme

The specific aims of the programme are to provide participants with a clear understanding of the scientific basis underlying the principles and practice of cancer therapeutics and the development, evaluation and implementation of new treatments.

This will be underpinned by a thorough knowledge of cancer biology and pathology, research methodologies, drug development and regulatory issues.

This knowledge will provide you with a good grounding in the use and evaluation of cancer therapies which will enhance career prospects in many areas of early phase clinical trials and clinical drug development in the cancer setting.

### What Will You Be Expected to Achieve?

On completion of the course students will:

Academic Content:	
A 1	have a good grounding in the molecular and cellular biology relevant to cancer
A 2	have a thorough knowledge of the principles underlying the diagnosis and treatment of cancer
A 3	understand the steps involved in developing and implementing new cancer treatments
A 4	understand the regulatory framework underlying clinical research
A 5	understand the principles of key laboratory methodologies applied to clinical trials

Disciplinary Skills - able to:	
B 1	demonstrate skills in gathering, recording, analysing and presenting information
B 2	contribute to the research activity and knowledge base in improving cancer care
B 3	apply knowledge gained from the programme in their own professional role

Attributes:	
C 1	experienced in oral and poster presentation
C 2	experience of working as part of a research-active group
C 3	significant laboratory or clinical research experience

### How Will You Learn?

Module and dissertation teaching will comprise the following;

- Whole-group seminars/lectures on specific topics. Tutors and students will be encouraged to develop a tutorial atmosphere in which dialogue and discussion can take place.
- Whole-group practical classes in small groups to address a specific practical method or topic. These will be recorded in the student's practical files.
- Whole-group demonstrations. These will take place in Institute laboratories or the class-room to address specific technologies (i.e. expression array technology) or methods (i.e. array data analysis).
- Student presentations on specific topics.
- Individual tuition will take place for all students during the 60 credit dissertation, or for students who require additional input in a particular topic area.
- Key generic skills will be acquired from each of the above.
- Teaching material will be available via the University's Virtual Learning Environment (VLE). A computer room with 16 PCs is provided for the use of Barts Cancer Institute students only.
- The majority of the teaching rooms, the practical lab and the computer room are on the Charterhouse Square campus. Some teaching may take place at St Bartholomew's Hospital, which is 5 minutes walk from Charterhouse Square.

The provision of key skills in the Research Methods module will enable students to maximise their ability to understand and learn from other modules. Students will maintain a file of practical work carried out in the core module which will be useful during the project module.

As self-directed learning is the major component of each module students will be encouraged to identify their own learning needs as modules progress. All students will have access to named personal mentors (lecturer grade or above) on entry to the course. These mentors will provide advice on issues arising from the course itself, and on issues such as post course employment and further training opportunities.

Students will have full access to the University/Medical School library and student computing facilities, in addition to the computer room provided. The course is delivered using a virtual learning environment (VLE) provided by the University. This enables lecture notes and handout material to be available electronically, provides space for discussion and question boards and allows assessed work to be uploaded remotely. For Distance Learning students lectures and tutorials are captured and uploaded immediately onto the VLE. The captured lecture includes classroom audio, all projected slides or images and whiteboard annotations made by the lecturer.

Classroom teaching will also involve a real time assessment of the group understanding of the topic being covered using the Turning Point student response system. This involves questions embedded into presentations to which the students respond,

using an individual unit that provides an anonymous response with a single click. This ensures that feedback is received from all students in the group, and provides students with a guide to their own understanding of a particular topic.

### How Will You Be Assessed?

Assessment of individual taught modules includes in-course assessments (typically 40% of the module mark) and an examination paper (typically 60% of the module mark). There is a small variation in the relative contribution of each assessment method between modules.

In-course assessments include presentations (oral and poster), vivas, written assignments and practicals.

The semester 3 dissertation is submitted as an assessed 10,000 word report. The overall dissertation mark also includes a mark for an oral presentation of the project and a supervisor mark based on the student's overall performance.

For DL students assessed presentations are given via Skype.

### How is the Programme Structured?

Please specify the full time and part time programme diets (if appropriate).

The full Masters course involves studying 180 credits. This includes:

- 105 credits of compulsory taught modules
- 15 credits of elective taught modules
- core dissertation which is worth 60 credits

Full time students study 60 or 67.5 credits (depending on elective selection) in semester 1 (September - December, delivered as 2 full days of teaching each week on Wednesday and Thursday) and are then examined on those modules in early January.

Students study a further 60 or 52.5 credits in semester 2 (January - April, delivered over 3 days each week, Tuesday, Wednesday and Thursday), with module exams at the end of that period. Students who have satisfactorily passed at least 90 credits are then able to progress to the dissertation module in semester 3.

Part-time students study 60 credits in year 1 and 60 credits in year 2. The dissertation module can either be studied part-time in semester 3 in years 1 and 2, or full-time in semester 3 in year 2.

Distance learning students can study the course either full-time or part-time.

The module diet shown in the following table is for full-time students taking the course over 1 year.

For part-time students the typical module diet would be:

Year 1

Semester 1

Cancer Biology; Cancer Pharmacology; (Pathology of Cancer, if selected as an elective)\*

Semester 2

Drug Development; Molecular Targeted Therapies and Immunotherapy for Blood Cancers, (Genomic Approaches to Cancer; Paediatric & Adolescent Oncology if selected as an elective)\*

Semester 3

Dissertation module

Year 2

Semester 1

Research Methods; (Pathology of Cancer, if selected as an elective)\*

Semester 2

Site Specific Tumour Treatment; Ablative Therapies; Cancer Prevention & Screening; (Genomic Approaches to Cancer; Paediatric & Adolescent Oncology if selected as an elective)\*

Semester 3

Dissertation module

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\*Part-time students study one elective module in year 1 and one elective module in year 2.

Academic Year of Study FT - Year 1

Module Title	Module Code	Credits	Level	Module Selection Status	Academic Year of Study	Semester
Research Methods	CANM937	15	7	Compulsory	1	Semester 1
Cancer Biology	CANM902	15	7	Compulsory	1	Semester 1
Cancer Pharmacology	CANM903	15	7	Compulsory	1	Semester 1
Pathology of Cancer	CANM909	7.5	7	Elective	1	Semester 1
Site Specific Tumour Treatment	CANM904	7.5	7	Compulsory	1	Semester 2
Ablative Therapies	CANM905	7.5	7	Compulsory	1	Semester 2
Molecular Diagnostics & Therapeutics	CANM921	15	7	Compulsory	1	Semester 2
Drug Development	CANM906	7.5	7	Compulsory	1	Semester 2
Paediatric & Adolescent Oncology	CANM911	7.5	7	Elective	1	Semester 2
Cancer Prevention & Screening	CANM912	7.5	7	Compulsory	1	Semester 2
Genomic Approaches to Cancer	CANM940	7.5	7	Elective	1	Semester 2
Molecular Targeted Therapies and Immunotherapy for Blood Cancers	CANM935	15	7	Compulsory	1	Semester 2
Dissertation	CANM936	60	7	Core	1	Semester 3

### What Are the Entry Requirements?

The course is aimed at graduate scientists, other professionals allied to medicine working in healthcare, the pharmaceutical industry or contract research organisations.

For admission to the programme students will need either;

- a good degree (2i or above, or 2ii with extenuating circumstances confirmed by an academic referee) or degree equivalent from a recognised academic institution

or

- an appropriate professional qualification with relevant work experience.

Students for whom English is a second language will also require a minimum IELTS 7 or TOEFL 610 score.

In addition to the above, students taking the course as a Distance Learning option will need access to computer and good internet connection, and will need to be within reasonable travelling distance of a British Council test centre or partner university to sit invigilated examinations.

## How Do We Listen and Act on Your Feedback?

The Staff-Student Liaison Committee provides a formal means of communication and discussion between schools/institutes and its students. The committee consists of student representatives from each year in the school/institute together with appropriate representation from staff within the school/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 school/institute operates a Learning and Teaching Committee, or equivalent, which advises the School/Institute Director of Taught Programmes on all matters relating to the delivery of taught programmes at school 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 schools/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; the main document of reference for this process is the Taught Programmes Action Plan (TPAP) which is the summary of the school/institute's work throughout the year to monitor academic standards and to improve the student experience. Students' views are considered in this process through analysis of the NSS and module evaluations.

## Academic Support

Students are encouraged to interact with academic staff during classroom teaching to foster a tutorial-like learning environment. Members of the teaching staff, (typically the module lead and 1 other), mark all assessed work and provide written feedback on the in-course assessments. Students are able to view that written feedback at any time. Indeed, in semester 1 feedback is given on research Skills practical write-ups within 1-2 weeks of submission to enable students to incorporate that feedback into their subsequent write-ups. Feedback on progress and performance is given to students individually at the end of each semester by the Course Director, with the proviso that all marks are provisional until confirmed by the relevant examination boards.

If a student is having difficulty with a particular module, topic or practical, additional teaching support can be provided. Students also have access to named personal mentors who can advise on areas in which the student may be having difficulty, or an issues such as post-course employment .

## Programme-specific Rules and Facts

The academic regulations relating to the programme are those used by the College, except for the following:

Progression to dissertation or project:

To progress to the dissertation or project module, a student must:

- take modules to the value of 120 credits; and,
- pass modules to the value of at least 90 credits; and,
- achieve an average mark of at least 50.0 across all taught modules; and,
- achieve module marks of at least 30.0 in all modules.

## Specific Support for Disabled Students

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)
- Access to specialist mentoring support for students with mental health issues and Autistic Spectrum Disorders.

## Links With Employers, Placement Opportunities and Transferable Skills

On completion you will have the theoretical and practical background to go into further laboratory or clinical research, or into various aspects of cancer drug development and clinical evaluation in the context of early phase trials.

Our graduate destinations include: PhD studentships (internal and external to the Institute), medical school, clinical trials research positions, laboratory research technicians, research assistants.

On successful completion of the course, students will have the opportunity to apply to work at our Centre for Experiment Cancer Medicate, to gain further experience of a clinical trials unit.

The distance learning option allows flexible learning and can be undertaken as part of Continuing Professional Development while employed by the National Health Service.

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## Programme Specification Approval

<b>Person completing Programme Specification</b>	Olivia Cooper
<b>Person responsible for management of programme</b>	Kaye Yeung
<b>Date Programme Specification produced/amended by School Learning and Teaching Committee</b>	10th Feb 2016
<b>Date Programme Specification approved by Taught Programmes Board</b>	Feb 2016 (For Sept 2016 Start)