

## Programme Specification (UG)

Awarding body / institution:	Queen Mary University of London
Teaching institution:	Queen Mary University of London
Name of award and field of study:	MSc Minimally Invasive Dentistry
Name of interim award(s):	PG Diploma in Minimally Invasive Dental Studies PG Cert in Minimally Invasive Dental Studies
Duration of study / period of registration:	Full time: One year / Part time: Two years
QMUL programme code / UCAS code(s):	PMSF-QMDENT1, PMSP-QMDENT1 / A4U0
QAA Benchmark Group:	Dentistry
FHEQ Level of Award :	Level 7
Programme accredited by:	N/A
Date Programme Specification approved:	
Responsible School / Institute:	Institute of Dentistry

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

N/A

Collaborative institution(s) / organisation(s) involved in delivering the programme:

N/A

### Programme outline

This MSc programme is open to dentists who seek to improve their clinical and professional skills in Minimally Invasive (MI) Strategies for the management of dental diseases. Our programme is designed to meet with all these major dental issues for all age groups, employer's needs and prepare students to be practicing in a sophisticated and holistic manner to manage and deliver services with MI approaches when required. The course will give a comprehensive insight of the MI concept, have a significant impact on clinical dentistry and will take a holistic approach to close the gap in clinical skills, knowledge and experiences of clinicians worldwide and this will foster a team approach to patient care..

As a student on our programme, you will acquire a deeper knowledge and understanding of basic and applied sciences and advance your clinical skills via a series of clinical exposure, laboratory based classes in a simulated dental setting and tutorials by exploring current concepts in clinical dentistry with minimally invasive strategies. This course has also a unique approach in postgraduate education with integrated ethical practice management and well-being seminars.

The basis of scientific knowledge will underpin the clinical learning experiences and taught primarily with ongoing emphasis of its importance throughout the programme. Whilst progressing through the course you will be expected to embrace all aspects of professionalism, teamwork and social responsibility by demonstrating your knowledge and ability to apply this in your clinical

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experience. You will spend time in the Clinical Skills Laboratory (CSL) where you will learn your clinical skills related to Minimally Invasive Dentistry and after a 'gateway' assessment of these newly found skills be permitted to provide treatment for allocated adult and child patients. You will progress through the programme clinically and you will also attend different Outreach locations in the east end of London. The patient base and oral disease you will encounter is diverse, providing you with a satisfying professional experience.

There will be full-time and part-time options. Some modules such as Dental Materials (Parts 1 & 2), Minimally Invasive approaches in Clinical Dentistry (Parts 1 & 2) will be timetabled in an order for the part-time route.

### Aims of the programme

This programme aims to:

- enhance knowledge, skills and experiences in clinical dentistry implementing minimally invasive approaches
- promote a critical approach to evaluate relevant literature to be able to establish evidence-based practice in Minimally Invasive Dentistry
- enhance understanding and the impact of clinical governance and clinical effectiveness
- Effective methods of health promotion and oral health promotion
- encourage the pursuit of independent research

The structure and features of health provision in the UK with particular regard to dentistry

### What will you be expected to achieve?

Students that successfully complete the programme will be able to:~

1. Assess and manage dental diseases using minimally invasive techniques
2. Undertake the comprehensive clinical management of dental patients of any age including diagnosis, treatment planning surgical and non-surgical management and prevention of dental diseases
3. Manage pain and anxiety in patients requiring dental treatment
4. Identify key transferable skills to aid them with their career goals and continuing professional development

This taught programme will also provide an environment that each postgraduate will communicate with their peers, encouraging exchange of ideas, knowledge and experience. Ultimately, this approach will contribute to and enhance postgraduates' career options by allowing them access to current concepts and research in Minimally Invasive Dentistry.

### **Please note that the following information is only applicable to students who commenced their Level 4 studies in 2017/18, or 2018/19**

In each year of undergraduate study, students are required to study modules to the value of at least 10 credits, which align to one or more of the following themes:

- networking
- multi- and inter-disciplinarity
- international perspectives
- enterprising perspectives.

These modules will be identified through the Module Directory, and / or by your School or Institute as your studies progress.

Academic Content:

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A 1	Excellence in knowledge and understanding in Minimally Invasive Dentistry.
A 2	The process of undertaking, with self awareness, analysis of complex, incomplete, 'cutting edge' or contradictory areas of clinical and scientific knowledge.
A 3	Enhance the clinical experiences with skills and knowledge by the exposure of multi-disciplinary dental cases.
A 4	The structure and features of health provision in the UK with particular regards to Minimally Invasive Dentistry.
A 5	The principles of Minimally Invasive approaches in clinical dentistry.
A 6	To apply the basic science that underpins the use of dental biomaterials in the selection and use of appropriate materials in clinical practice and explain their limitations.
A 7	To describe the features of a safe working environment and the principles of risk management.
A 8	To explain the range of methods of learning and teaching available and the importance of assessment, feedback, critical reflection, identification of learning needs and appraisal in personal development planning.
A 9	To describe the attributes of professional attitudes and behaviour at all times, in all environments and media.
A 10	To discuss basic sciences including oral anatomy, physiology and pharmacology with respect to health and disease.
A 11	To identify and describe how to integrate the highest level of evidence, patient values and personal experience and knowledge in clinical decision making at the patient level.
A 12	To understand how to conduct a research project in the field of Minimally Invasive Dentistry with an extensive literature review.

Disciplinary Skills - able to:	
B 1	Underpin all patient care with a preventive approach that contributes to the patient's long term oral and general health.
B 2	Evaluate advanced scholarship critically in evidence based endodontic disease, make a case for alternative approaches and explore scientific clinical research in order to be able to audit current practice.
B 3	Assess and manage dental caries, occlusion and tooth surface loss and where appropriate to restore the dentition using the principle of minimal invasive strategies.
B 4	Perform clinical dentistry using minimally invasive strategies within different disciplines such as restorative dentistry, endodontology, fixed and removable prosthodontics, periodontology and pediatric dentistry.
B 5	Recognise and apply the principles derived from the biomedical, behavioural and materials sciences to the practice of dentistry, and take account of the needs of different patient groups including children, adults, older people and those with special care requirements throughout the patient care process.
B 6	Describe statistical methods, the principles of research governance and ethics and research methodology.
B 7	Critically explore and evaluate scientific and clinical research in order to appraise the evidence base for current clinical practice.
B 8	Describe and respect the roles of dental and other healthcare professionals in the context of learning and working in a dental and wider healthcare team.
B 9	Take responsibility for ensuring compliance with current best practice guidelines.

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B 10	Recognise and apply the principles derived from the biomedical, behavioural and materials sciences to the practice of dentistry, and take account of the needs of different patient groups including children, adults, older people and those with special care requirements throughout the patient care process.
B 11	Manage own time and resources effectively and efficiently.
B 12	Self-reflection and analysis of research.
B 13	Critique and evaluate the different approaches to collecting and analysing data, and communicate it coherently.
B 14	Understand the role of professional and self-regulation.
B 15	Demonstrate Good Laboratory Practice and adhere to safety requirements where necessary.
B 16	To have the skills to collect data in written format to analyse and interpret in a logical manner.

Attributes:	
C 1	Appraise and investigate cases and literature so that an evidence-based approach is undertaken.
C 2	Promote ethical practice and effective communications skills.
C 3	Manage well-being and have an understanding in practicing mindfulness.
C 4	Extract and analyse information to identify problems and solutions and generate discussion on a broad range of issues.
C 5	Exercise sound clinical judgment around the selection and execution of appropriate operative techniques for all stages of planned treatment in conjunction, as necessary, with other specialists and technicians.
C 6	Communicate with patients, the public, members of the team and other professionals to ensure a holistic approach to the delivery of care.
C 7	Manage pain and anxiety in patients requiring dental treatment.
C 8	To learn continuously in a changing world.
C 9	Demonstrate the professional attitudes and behaviours relating to the care of all types of patients, colleagues and to peers.
C 10	To think critically utilizing the taught and acquired information and material.

### How will you learn?

A variety of teaching and learning methods will be employed including:

- Formal 1 to 3 hour seminars given by experts in their field on topics relevant to Minimally Invasive Dentistry
- Regular pre-clinical laboratory practice sessions: demonstrations, “hands-on” practical exercises, discussion of outcomes
- Regular weekly clinical practice sessions: treating patients under supervision, discussion of outcomes
- Self-directed learning: critical review of scientific papers organised by the programme organisers
- One-to-one support with those students needing additional guidance when/if required
- Case presentations: discussion on what was carried out, how, and why it was carried out, reflecting on shortcomings and how it could be improved the next time
- E-learning
- Reading lists of books and journal papers

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In order to achieve the programme learning outcomes students are expected to undertake independent study and weekly self-directed study sessions are timetabled to allow students to prepare for scheduled sessions, follow-up work, wider reading, research and revision.

Students could attend a study skills session at Queen Mary University of London at the start of the MSc course to prepare them for Postgraduate study in the UK and academic writing sessions to support writing of their dissertation.

### How will you be assessed?

Assessment strategies :

- Formative assessment
- Summative assessment of each module
- Competency-based Practical test on a typodont prior to patient treatment

Assessment strategies support student learning and feedback is provided to students on assessed work by teachers.

There will be 1:1 support system provided for competency-based practical tests.

### How is the programme structured?

Please specify the structure of the programme diets for all variants of the programme (e.g. full-time, part-time - if applicable). The description should be sufficiently detailed to fully define the structure of the diet.

The programme can be studied on a full-time and part-time basis.

Students undertake eight 15-credit taught modules and a 60-credit Research Project, all modules are level 7 (Master's level).

All taught modules are compulsory.

Part-time students will undertake four taught modules in their first year of study, taking the remaining taught modules in their final year alongside the Research Project.

Due to the clinical nature of the programme modules must be taken in a certain order; such as Dental Materials (Parts 1 & 2), MID in Clinical Dentistry (Parts 1 & 2).

Overall, the programme will consist of 120 credits of taught content and 60 credits of research content.

The programme requires students to undertake a gateway test, this will be carried out after the Minimally Invasive approaches in Clinical Dentistry Part 1 (DIN7152) module. Students will need to demonstrate a satisfactory level of ability by passing a practical test of competence before being allowed to do patient treatment within the Minimally Invasive approaches in Clinical Dentistry Part 2 (DIN7158) Module.

## Academic Year of Study FT - Year 1

Module Title	Module Code	Credits	Level	Module Selection Status	Academic Year of Study	Semester
Properties of Dental Materials Part 1/ Processing Methods	DIN7008	15	7	Compulsory	1	Semester 1
Properties of Dental Materials Part 2	DIN7009	15	7	Compulsory	1	Semester 2
Minimally Invasive approaches in Clinical Dentistry Part 1	DIN7152	15	7	Compulsory	1	Semester 1

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Module Title	Module Code	Credits	Level	Module Selection Status	Academic Year of Study	Semester
Oral Pathology and the Oral Microbiome	DIN7028	10	7	Compulsory	1	Semesters 1 & 2
Fundamentals of Research methodology	DIN7011	15	7	Compulsory	1	Semesters 1 & 2
Older population and oral health with Minimally Invasive Strategies	DIN7159	15	7	Compulsory	1	Semesters 1 & 2
Oral health management for children by implementing MI techniques	DIN7161	15	7	Compulsory	1	Semesters 2 & 3
Minimally Invasive approaches in Clinical Dentistry Part 2	DIN7158	15	7	Compulsory	1	Semesters 2 & 3
Level 7 Research project	DIN7000	60	7	Core	1	Semesters 1-3

Academic Year of Study PT - Year 1

Module Title	Module Code	Credits	Level	Module Selection Status	Academic Year of Study	Semester
Properties of Dental Materials Part 1/ Processing Methods	DIN7008	15	7	Compulsory	1	Semester 1
Minimally Invasive approaches in Clinical Dentistry Part 1	DIN7152	15	7	Compulsory	1	Semester 1
Properties of Dental Materials Part 2	DIN7009	15	7	Compulsory	1	Semester 1
Minimally Invasive Dentistry Part 2	DIN7158	15	7	Compulsory	1	Semesters 2 & 3

Academic Year of Study PT - Year 2

Module Title	Module Code	Credits	Level	Module Selection Status	Academic Year of Study	Semester
Level 7 Research project	DIN7000	60	7	Core	2	Semesters 1-3
Fundamentals of Research methodology	DIN7011	15	7	Compulsory	2	Semesters 1 & 2

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Module Title	Module Code	Credits	Level	Module Selection Status	Academic Year of Study	Semester
Oral Pathology and the Oral Microbiome	DIN7028	10	7	Compulsory	2	Semester 2
Older population and oral health with MI approaches	DIN7159	15	7	Compulsory	2	Semesters 1 & 2
Oral health management for children by implementing MI techniques	DIN7161	15	7	Compulsory	2	Semesters 2 & 3

### What are the entry requirements?

- BDS degree or equivalent
- An IELTS score of 7.0 is required including a minimum score of 6.0 in writing and a minimum score of 6.0 in either reading, listening or speaking. (A minimum IELTS score of 6.5 is required at the point of submission in order for an application to be considered, but an IELTS score of 7.0 must be achieved before the course starts. Pre-sessional English course is available to improve the score by 0.5 if a conditional offer is given).

If you are offered a place on this course you will be required to undertake a DBS and an occupational health check.

### How will the quality of the programme be managed and enhanced? How do we listen to and act on your feedback?

- Student Voice Committee (SVC) meetings: There are periodic meetings of the SVC to give the students an opportunity to raise issues related to the programme.
- Student feedback mechanisms: Clinical programmes facilitate the provision of two way informal feedback. This process will be adopted and developed throughout the course. Formal feedback will be sought twice-yearly via a standard questionnaire adopted for use by the Institute's postgraduate programmes, based on NSS content.
- Programme review: the programme coordinators will participate in the annual review and monitoring process.

### What academic support is available?

Taught postgraduate programmes in the Institute are co-ordinated through the Dental Postgraduate Committee which takes an overview of all taught postgraduate programmes and any issues impacting upon their quality. Progression will be managed through the Subject Examination Board.

- Personal tutor arrangements: The programme organiser will act as personal tutors to the students.
- Student Support service at the Institute
- Programme induction: There will be a formal induction to the programme at the start with the programme organisers and the tutors present, to welcome the students and to introduce the various components of the programme. There will also be a tour of the facilities.

### How inclusive is the programme for all students, including those with disabilities?

The Institute of Dentistry will provide the following:

#### Student Support

The Student Support Office (SSO) offers confidential, independent, and non-judgmental advice on personal, academic, and financial matters, including university procedures and student funding. The SSO is committed to ensuring students receive the support they need to succeed.

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### Disability and Dyslexia Service (DDS)

Queen Mary's Disability and Dyslexia Service (DDS) supports all students with disabilities, learning difficulties, or mental health conditions whether full-time, part-time, undergraduate, postgraduate, UK, or international students across all campuses. The DDS provides guidance and assistance in the following areas:

- Assessment for specific learning difficulties (e.g., dyslexia)
- Applying for Disabled Students' Allowance (DSA). Arranging DSA assessments of need
- Organizing special examination arrangements
- Access to loaned equipment (e.g., digital recorders)
- Specialist one-to-one study skills tuition
- Providing course materials in alternative formats
- Educational support workers (e.g., note-takers, readers)
- Specialist mentoring for students with mental health issues or Autism Spectrum Disorders

### Support for Specific Learning Disabilities:

- Regular one-to-one study skills sessions with a dyslexia specialist
- Lecture notes provided in advance through QMPlus or email
- Q-Review lecture access, or permission to record non-Q-Review sessions (e.g., Clinical Skills Laboratory sessions on Phantom Heads/the use of Haptics)
- Specialist software with text-to-speech functionality to aid concentration and reduce fatigue

### Support for Physical Disabilities:

- Speech recognition software for dictation
- Accessible lab and clinic environments, including ground-floor clinics, lifts to higher floors, and ramps

### Inclusive Education

We are committed to providing all students with equal access to learning opportunities. Inclusivity ensures that all students are valued and supported, regardless of their background or circumstances, in line with the QMUL 2030 Strategy, which emphasizes "progressive, inclusive" teaching and curriculum design centred on the student experience.

To achieve these goals, inclusive pedagogical practices recognize the importance of diverse knowledge, identities, and ways of learning. This approach shifts the focus from student deficits to individual abilities and needs, ensuring that institutional practices do not alienate certain groups of students.

## Programme-specific rules and facts

Due to the clinical nature of the programme, exit awards will be entitled "Minimally Invasive Dental Studies."

## Links with employers, placement opportunities and transferable skills

The new face of dentistry is moving towards Minimally Invasive approaches, therefore this course would provide postgraduates with skills that employers are seeking currently. In addition, the employability of dentists with special interests to improve access to 'specialist' care will be enhanced. Clinical Dentistry including Endodontics, Periodontology, Fixed&Removable Prosthodontics with Paediatric Dentistry is an area where patients can keep their teeth for life with a longitudinal and personalised care plan.

The programme is jointly hosted by the Institute of Dentistry, Barts and The London School of Medicine & Dentistry, and the Royal London Dental Hospital, Barts & The London NHS Trust. The students will be qualified dentists.



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Dentistry is a flexible career for those wishing to take time out, to work irregular days or hours, or for those who wish to work in more than one location or environment.

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## Programme Specification Approval

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**Person completing Programme Specification:**

Mrs Lorraine Low, Quality & Assessments Officer

**Person responsible for management of programme:**

Prof Aylin Baysan

**Date Programme Specification produced / amended by School / Institute Education Committee:**

31 Oct 2024

**Date Programme Specification approved by Taught Programmes Board:**