



Programme Specification

A statement of the knowledge, understanding and skills that underpin a taught programme of study leading to an award from
The University of Sheffield

1	Programme Title	Master of Clinical Dentistry in Orthodontics
2	Programme Code	DENT74 Orthodontics (NHS)
3	JACS Code	A400
4	Level of Study	Postgraduate
5a	Final Qualification	MClinDent
5b	QAA FHEQ Level	M (UG or PG Level M)
6a	Intermediate Qualification(s)	A Diploma and a Certificate
7	Teaching Institution (if not Sheffield)	Not applicable
8	Faculty	Medicine, Dentistry and Health
9	Department	School of Clinical Dentistry, Oral Health, Dentistry and Society
10	Other Departments involved in teaching the programme	Not applicable
11	Mode(s) of Attendance	Part-time
12	Duration of the Programme	3 years
13	Accrediting Professional or Statutory Body	None
14	Date of production/revision	May 2023

15. Background to the programme and subject area

Orthodontics is the major specialism in dentistry concerned with the treatment of malocclusion of the dentition. The Master of Clinical Dentistry (MClinDent) programme is aimed at dental surgeons holding a primary dental degree with at least two years' experience in hospital or general dental practice and is based primarily in the Department of Oral Health, Dentistry and Society with clinical activities in the Charles Clifford Dental Hospital, which is part of the Sheffield Teaching Hospitals NHS Foundation Trust.

The academic unit of Oral Health, Dentistry and Society is one of the units in the School of Clinical Dentistry. The unit teaches on the undergraduate dental degree course (BDS), covering orthodontics, paediatric dentistry, Dental Public Health, psychology, sociology and behavioural science.

The School of Clinical Dentistry is directly connected to the Charles Clifford Dental Hospital (CCDH), where all patient treatment is carried out. The Department of Orthodontics in CCDH has a joint University and Hospital function and therefore is responsible for the treatment of patients needing a wide variety of orthodontic treatment. It consists of a 14 chair orthodontic clinic. The hospital also has extensive dental technology laboratory facilities on its third floor, which provide a service for patients. CCDH also provides training opportunities for dental nurses, hygienists and therapists, the latter being provided by the Diploma programme in Dental Hygiene and Therapy.

This programme builds upon the basic understanding of orthodontics that will have been gained at undergraduate level by dental graduates and is particularly suited to those who have obtained some general postgraduate experience. Potential employment prospects include openings in clinical work, research and teaching and further training and experience to specialist standard.

16. Programme aims

The general aims of the MClinDent (Orthodontics) programme are:

- To provide sufficient knowledge, skills, abilities and stimulation to develop appropriate attitudes to enable independent practice of orthodontics.

- To stimulate students to maintain and extend these attributes through Continuing Professional Development.

The level of training provided will not be sufficient for registration as an orthodontic specialist in the European Union. An additional year of training is necessary for this.

On completion of the MClinDent programme, it is expected that students will have developed their knowledge, understanding, skills and attitudes beyond the level of their first degree to fulfil the following learning outcomes:

17. Programme learning outcomes

Knowledge and understanding:	
Candidates for MClinDent, PG Diploma and PG Certificate will gain:	
K1	Understand deviations of the development of the dentition of facial growth and occurrence of functional abnormalities.
K2	Understand psychological aspects relevant to orthodontics.
K3	To develop a scientific attitude and an inquiring mind.
In addition, candidates for MClinDent and PG Diploma:	
K4	Understand the principles of clinical audit and service evaluation.
K5	Understand the principles of scientific methodology.
In addition, candidates for MClinDent:	
K6	Understand the multi-disciplinary approach for the treatment of compromised (adult) patients, orthodontic surgical cases and cleft palate patients.

Skills and other attributes:	
Candidates for MClinDent, PG Diploma and PG Certificate will gain:	
S1	Be able to evaluate the need for orthodontic treatment.
S2	Be able to diagnose anomalies of the dentition, facial structures and functional conditions.
S3	Maintain high ethical standards.
In addition, candidates for MClinDent and PG Diploma:	
S4	Be ready to enhance clinical skills and understanding by further study and be prepared to aid others in their acquisition of understanding and expertise.
S5	Be prepared to modify skills to the changing needs to the individual and the community.
S6	Be able to carry out interceptive orthodontic measures.
In addition, candidates for MClinDent:	
S7	Be capable of interpretation of literature.
S8	Be able to formulate a treatment plan and predict its course.
S9	Be able to execute simple and complex treatment procedures.
S10	Be able to prepare oral and written presentation of clinical and research findings.

18. Teaching, learning and assessment

Development of the learning outcomes is promoted through the following teaching and learning methods:
<p>1. Induction period: After allocation and discussion of the Programme Handbook, the initial four weeks is directed at providing the student with an introduction to the structure and methods of the programme and ensuring that they receive appropriate orientation to the regulations and procedures of the University, Faculty, School, Department, NHS Trust and Dental Hospital. This period is also utilised to ensure that the student has the requisite level of appreciation of the study skills, IT skills and knowledge of basic general dentistry and orthodontics necessary to benefit fully from the course (S1).</p> <p>2. Staff-led seminars: A series of seminars is used to provide essential background and practical information</p>

on clinical and other procedures used in orthodontics. In addition, students will be either required or encouraged to attend prescribed seminars such as those available from the Dental School's research seminar programme. (K4, K5, S6, S7).

3. Student-led seminars: "Journal Club" sessions involve individual students being allocated orthodontic-related papers from the scientific literature for study, analysis and then encapsulated verbal presentation to other students and staff for further discussion. The papers used are either diagnostically-based or research-based or both (K3, S6-S8).

4. Practical clinical and laboratory techniques: focus on the development of practical skills appropriate to the clinical situation or the background laboratory support for these. Students have to demonstrate sufficient knowledge and skill before undertaking invasive clinical procedures on patients (K1-K3, S1-S5).

5. Lectures: These are not a formal part of the programme, but dependent upon a student's background and interest they may be required or encouraged to attend the lectures on orthodontics that form part of the course for dental undergraduates (K1).

6. Assignments: Each student completes critical review on selected topics in Orthodontics. The reviews must be fully referenced and submitted in word-processed form. (K1-K3, S9-10).

7. Dissertation: In discussion with academic staff each student chooses a project that will culminate in the presentation of a research dissertation. This must involve the pursuit of work based upon an approved protocol which should clearly state the objectives, key references, a broad outline of the methods involved, an estimate of resources required and an estimate of the time involved. The final version of the dissertation must be fully referenced, word processed and bound (S6-S8).

8. Independent study: All of the above teaching and learning methods involve an element of independent study, preparing work for presentation, following up on aspects that become apparent in laboratory or diagnostic practice, and pursuing topics that are relevant to orthodontics but may not be covered formally in course material. Students are encouraged to make full use of the opportunities presented by having access to the facilities of the Dental School, Dental Hospital and University (K1, K3, S9-S10).

9. Clinical Logbooks: each student must present a logbook of patients treated during the programme. As well as clinical details and treatment outcomes these case reports must include examples of self reflective and evidence-based practice (K1, S5).

Opportunities to demonstrate achievement of the learning outcomes are provided through the following assessment methods:

Formative assessments: The monitoring of progress of students is by a process of continuous assessment, which includes the allocation of assignments. In the first two weeks the students will undertake an intensive induction module. This is to provide a benchmark of the student's existing abilities and to identify areas of knowledge or skill which might require particular attention. Subject to satisfactory performance students will be allowed to begin patient treatment (S1).

For their research projects, students will be required to present their work in the form of a written dissertation in July of the third year (S6-8).

Summative assessments will be undertaken at the end of each module and will include the following components:

- Written examination papers.
- Oral and written presentation of project work undertaken by the student.
- Clinical examinations will be based on oral and written presentation of cases treated by the student, and an ability to diagnose and treatment plan cases not seen previously by the student.
- Dissertation.

The award of the degree will depend upon satisfactory performance in all the required modules.

19. Reference points

The learning outcomes have been developed to reflect the following points of reference:

- The Mission Statement of the University of Sheffield <http://www.sheffield.ac.uk/ourplan/>
- General Dental Council's Life Long Learning Statement <https://www.gdc-uk.org/professionals/cpd>
- The Quality Assurance Agency for Higher Education in England and Wales Benchmark Statement with regard to provision of subject knowledge and transferable skills
<http://www.qaa.ac.uk/AssuringStandardsAndQuality/subject-guidance/Pages/Subject-benchmark-statements.aspx>
- The curriculum as published by The General Dental Council in its document "The First Five Years"
- The Learning and Teaching Strategy of the University of Sheffield
<https://www.sheffield.ac.uk/vision/our-pillars/education>
- The guidelines of Masters' level courses within the Faculties of Medicine, Dentistry and Health at the University of Sheffield

20. Programme structure and regulations

The programme runs from October to September and is undertaken part-time in three academic years. The candidate will need to complete the Final Examination for the Degree before completion. The programme consists of four 15 week semesters (October to January, January to July) followed by a third academic year from September to July for completion of clinical work and the research dissertation.

Details of the programme are as follows:

1.	A person may be admitted as a candidate who is registered on the appropriate part of the Professional Register, or is a recognised graduate in Dentistry, and who has completed not less than two years work as a dentist in a clinical setting deemed acceptable by the Board.			
2.	The programme of study shall be pursued for two years full-time.			
3.	A candidate shall take:			
(a)	DEN601	F7	Research Methods in Clinical Dentistry	15
	DEN602	F7	Principles of Clinical Management	15
	HAR6035	F7	Introduction to Statistics and Critical Appraisal	15
	CDH608	F7	Principles of Clinical Orthodontics I	15
(b)	CDH609	F7	Principles of Clinical Orthodontics II	30
	CDH610	F7	Orthodontic Case Studies	30
(c)	CDH611	F7	Orthodontic Dissertation	60
	CDH612	F7	Orthodontic Clinical Practice	0
4.	A candidate who has been awarded <i>one hundred and twenty</i> credits in respect of the units listed above shall be eligible for the award of the Postgraduate Diploma in Orthodontics.			
5.	A candidate who has been awarded <i>sixty</i> credits in respect of the units listed at 3(a) and (b) above shall be eligible for the award of the Postgraduate Certificate in Orthodontics.			

Detailed information about the structure of programmes, regulations concerning assessment and progression and descriptions of individual modules are published in the University Calendar available on-line at <http://www.sheffield.ac.uk/calendar>

21. Student development over the course of study

The programme begins with registration and the Introductory week at the start of the first academic semester. Following this in the first two weeks the students will undertake an introductory orthodontic course and an intensive typodont course. Subject to satisfactory performance students will be allowed to begin patient treatment. Satisfactory clinical performance during the second half of the Semester will allow the student to continue. Failure at this stage will prevent the student from undertaking clinical work and may result in the student being advised to leave the programme.

The award of the degree will depend upon satisfactory performance in all four areas of Research Methodology (including statistics); Principles of Clinical Orthodontics and Case Studies, Orthodontic Clinical Practice and the Research Dissertation. For their research projects, students will have regular meetings with their supervisors and will be expected to give at least one presentation of their protocol and findings before submitting their dissertation in the July of the third year.

22. Criteria for admission to the programme

Detailed information regarding admission to programmes is available from the webpage: <http://www.sheffield.ac.uk/dentalschool/masters/orthodontics>. The Master of Clinical Dentistry (Orthodontics) programme is aimed at dental surgeons holding a primary dental degree with at least two years' experience in hospital or general dental practice.

23. Additional information

The Dental School in Sheffield was first established in the early 1900s and Sheffield University has been awarding a degree in Dental Surgery since 1922. The current Dental School building was opened in 1992.

On the ground floor of the School you will find our 120-seat lecture theatre which was upgraded in 2007 and is equipped with up-to-date audio visual equipment. There are also six seminar/tutorial rooms, an IT Suite with 20 workstations and an internet café / common room. All our academic units have study rooms for use by postgraduate students and all have access to computer facilities. If you need it, the School has wireless connectivity.

On the second floor of the School there is a 54-unit recently upgraded Clinical Skills Laboratory with a dental chair for demonstrations via a live video link and computers offering computer aided learning packages. In the annexe to the School, we have a newly refurbished 40-unit Dental Technology Laboratory with associated materials processing facilities.

In 2009 the School opened a new wing which houses purpose-built and state of the art research laboratories for cell and tissue culture, microbiology, electron microscopy, histology, histochemistry and immuno-cytochemistry, biochemistry, molecular biology, proteomics and materials science.

The Dental School is connected to the recently redeveloped Charles Clifford Dental Hospital. Completed in 2009, the redevelopment included the upgrading of many areas within the hospital including new clinical facilities.

The various clinical departments are equipped with dental units in both open clinics and small side clinics. Facilities for treatment under inhalation anaesthesia as well as conscious sedation and recovery are available. The Dental Hospital has a well equipped radiography department and we also have our own oral pathology laboratories which provide support services for all clinical areas. A dental production laboratory supports both undergraduate and postgraduate teaching and learning as well as providing National Health Service treatment. All these clinical facilities are used by undergraduate and postgraduate dental students. All students are provided with clinical attire. Changing rooms and canteen facilities are available in the basement of the Dental Hospital.

Research is one of the School's key activities. In the recent Research Excellence Framework (REF) assessment exercise 92% of the Dental School's research was graded as 'world-leading' or 'internationally excellent'. The School was given an 'excellent' (23/24) rating in the last (2001) QAA Subject Review exercise and in a recent independent review of teaching was described as 'an excellent school of international calibre.'

For further information prospective students are directed to the School web pages at <http://sheffield.ac.uk/dentalschool/>