



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

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| 1 | Programme Title | Doctorate in Clinical Dentistry – Endodontics / Periodontics / Prosthodontics |
| 2 | Programme Code | DENT33, DENT34, DENT35 |
| 3 | JACS Code | A400 |
| 4 | Level of Study | Postgraduate |
| 5a | Final Qualification | DClinDent in: Endodontics / Periodontics / Prosthodontics |
| 5b | QAA FHEQ Level | M (UG or PG Level 8) |
| 6a | Intermediate Qualification(s) | An MMedSci (Year 1) and an MClindent (Year 2) |
| 6b | QAA FHEQ Level | M (UG or PG Level 8) |
| 7 | Teaching Institution (if not Sheffield) | Not applicable |
| 8 | Faculty | Medicine, Dentistry and Health |
| 9 | Department | School of Clinical Dentistry, Restorative Dentistry |
| 10 | Other Departments involved in teaching the programme | Not applicable |
| 11 | Mode(s) of Attendance | Full time or Part-time |
| 12 | Duration of the Programme | 3 years |
| 13 | Accrediting Professional or Statutory Body | None |
| 14 | Date of production/revision | Sept 2012 / Jan 2016 / Jan 2017 / Feb 2018 / Oct 2023 |

15. Background to the programme and subject area

The Restorative Monospecialties are the major specialisms in dentistry concerned with the treatment of the supporting structures of the dentition, the pulpal tissues, tooth structure and the methods of replacing missing teeth. The Doctorate of Clinical Dentistry (DClinDent) Restorative Dentistry courses, are aimed at dental surgeons holding a primary dental degree with at least two years' experience in hospital or general dental practice and are based primarily in the Unit of Restorative Dentistry with clinical activities in the Charles Clifford Dental Hospital, which is part of the Sheffield Teaching Hospitals NHS Foundation Trust.

The Academic Unit of Restorative Dentistry is one of seven academic units in the School of Clinical Dentistry. The unit teaches on the undergraduate dental degree course (BDS), covering all aspects of restorative dentistry.

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 Restorative Dentistry in CCDH has a joint University and Hospital function and therefore is responsible for the treatment of patients needing a wide variety of restorative treatments. It consists of 87 chairs split between two floors. Some are open clinics and some are enclosed surgeries, most of which was refurbished in 2008/2009. The hospital also has extensive dental technology laboratory facilities on its second and 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 Dental Therapy. A MSc in Dental Technology is also provided by the Academic Unit of Restorative Dentistry and whilst both courses have been planned as "stand-alone" they should dovetail together, producing benefits for both programmes.

This course builds upon the basic understanding of endodontics, periodontics and prosthodontics 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 that contribute to the requirements for training in the Restorative Monospecialties as outlined in the curriculum on the General Dental Council web site.

16. Programme aims

Upon completion of this programme, students will demonstrate:

- A systematic acquisition and understanding of a substantial body of knowledge and a critical awareness of the issues that determine successful clinical outcomes, informed by the forefront of knowledge in restorative dentistry.
- The ability to create and interpret new knowledge through advanced scholarship, to a level that will satisfy peer review.
- The ability to conceptualise, design and implement a research project that will increase our understanding at the forefront of the discipline.
- Their personal responsibility for independent learning, autonomous decision-making in complex and unpredictable situations resulting in sound judgements, planning and implementing tasks at a professional level and being able to communicate clearly and professionally to specialist and non-specialist audiences.
- The knowledge, skills, abilities and attitudes to enable independent practice of the selected monospecialty, at the standard of a Specialist.

RCSEd Recognised Training Pathway for award of Specialty Membership in Endodontics, Periodontics and Prosthodontics. Conjoint examination for DClinDent (University of Sheffield) and Membership (RCSEd) Degrees.

17. Programme learning outcomes

Knowledge and understanding:

Candidates for DClinDent Restorative programmes will:

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| K1 | Demonstrate an understanding of the anatomy and physiology of the oral and peri-oral tissues. |
| K2 | Demonstrate an understanding of the aetiology pathobiology and clinical presentation of diseases of the oral and peri-oral tissues. |
| K3 | Demonstrate an understanding of general and clinical epidemiology of oral diseases. |
| K4 | Demonstrate understanding of biomaterial science relevant to the restorative monospecialties. |
| K5 | Demonstrate an understanding of the impact of systemic diseases on oral tissues and of oral disease on systemic health. |
| K6 | Demonstrate an understanding of the behavioural, clinical and technical procedures involved in the treatment of patients requiring care within the restorative monospecialties. |
| K7 | Communicate individually with patients and other professionals and in general educational and professional settings. |
| K8 | Show evidence of the ability to plan and undertake a research project. |

Skills and other attributes:

Candidates for DClinDent Restorative programmes will:

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| S1 | Demonstrate a broad and sound understanding of the evidence base in the restorative monospecialties. |
| S2 | Show professional judgement to implement clinical solutions in response to problems by developing an evidence-based treatment plan and taking an holistic approach to solving problems and designing treatment plans. |
| S3 | Demonstrate the ability to critically assess scientific papers and available evidence such as guidelines using a variety of information sources. |
| S4 | Evaluate critically the scope and limitations of the various techniques used in the restorative monospecialties, balancing the risks and cost benefits of treatment demonstrating self-direction and autonomy. |
| S5 | Develop an integrated insight into how the development and impact of their knowledge and skills is of value and relevance to the workplace. |

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| S6 | Appraise systematically current evidence in the restorative monospecialties and appreciate how research activity can inform practice. |
| S7 | Demonstrate the ability to sustain a critical argument in writing and through oral presentations. |
| S8 | Demonstrate a sound understanding of the importance of hypothesis-setting and the design of suitable projects to address questions relating to the practice of the monospecialty. |
| S9 | Perform all appropriate clinical examinations proficiently, collecting biological, psychological and social information needed to evaluate the oral and related medical conditions for all patients. |
| S10 | Provide clinical care to the highest ethical and technical standards in line with current knowledge and with the full and valid consent of patients. |
| S11 | Demonstrate clinical proficiency in the delivery of preventive and interventional care as part of a holistic, comprehensive treatment plan. |
| S12 | Recognise and manage behavioural and related social factors which affect oral health. |
| S13 | Use clinical information to implement strategies that facilitate the delivery of oral health. |
| S14 | Co-ordinate overall treatment and care of patients and appreciate when it is appropriate to refer to a specialist in another area or a dental care professional. |
| S15 | Demonstrate the communication skills necessary to support patients and to translate changes in clinical practice informed by clinical audit and research to the commissioners of oral healthcare through critical analyses of published data from clinical and laboratory-based studies. |
| S16 | Become an effective and efficient leader of a multi professional team practicing in the chosen monospecialty. |
| S17 | Undertake audit, peer review and continuing professional development guiding the learning of others. |
| S18 | Learn independently in familiar and unfamiliar situations with open-mindedness and in a spirit of critical enquiry. |

18. Teaching, learning and assessment

Development of the learning outcomes is promoted through the following teaching and learning methods:

Lectures

Lectures will be used to deliver core knowledge, to provide an overview of the subject and to guide students in their independent study. Attendance at journal clubs and research presentations within the department will further enhance the student's breadth of knowledge and how this impacts on their chosen specialty. (K1-5).

Seminars

Seminars will be based on students' independent study and will be used to enhance their understanding of specific areas. Student-led critical appraisals of the literature (annotated bibliography) will enable the student to appraise systematically current evidence in the discipline. Preparation and delivery of evidence-based presentations will enable the student to sustain a critical argument in writing and through oral presentations (K1-5 & S1).

Tutorials

Tutorials (ad-hoc, 1:1 or group based) will be delivered by staff during the course to enhance student's understanding, and as a forum to discuss topics in a group environment. Tutorials will be delivered by clinical experts, project supervisors and other experts, such as statisticians, in order to enhance the student's understanding and give guidance. (K1-5 & S1).

Problem Solving

Clinical case-based discussions: Students will present clinical cases in which they have had a significant involvement in the development of a treatment strategy and/or managed/executed the restorative treatment care of the patient. They will document the cases, in accordance with specific guidelines and templates, present this to peers and staff and be able to discuss and defend the case in a comprehensive manner. Peer-review of clinical practical work will enhance the student's ability to critically appraise their own performance. (S1-3, S6, S7 & S13).

Clinical Skills Lab

Laboratory sessions (Clinical skills and Technology laboratory) will be a key component of L&T to meet specific objectives. These sessions will consist of an initial tutor-led demonstration followed by student self-directed practical work. Further tutor-led supervision and feedback will be provided at intervals during the particular sub-course. (K6, S10).

Supervised Clinical Activity

Supervised clinical activity will be undertaken on consultant-led new patient referral clinics. These will take place on a weekly basis and, at different times throughout the year and throughout the course, they will rotate between the different restorative specialties.

Students will undertake the comprehensive clinical management of patients within their chosen specialty and as appropriate, interfacing with the other two specialties. Students will be provided with an appropriate number of patients requiring a range of treatments using a wide variety of techniques, which would give the student an appropriate exposure to a wide case mix and range of clinical experiences.

Teaching will be provided on a one-to-one basis with a clinical supervisor for each session and informal feedback will be provided on the clinic. Students will undertake aspects of clinical care with decreasing levels of supervision as the student attains competency.

Professional communication: Students will learn how to communicate at an appropriate level with colleagues, patients and other professionals. They will learn how to write reports, referral letters and undertake associated patient administration duties. (K7, S1, S2, S4, S6 & S9-S14, S16).

Independent study

Independent study will enable the students to undertake further private study related to the subject matter and will also include pre-course reading, preparation of seminars and self-directed practical work in the clinical skills and technology laboratories. (K8 & S18).

Log books

Reflective feedback of all course work (practical and theoretical) and formative feedback on professionalism are designed to enhance the student's learning experience. (S4 & S9-S14, S16).

Research Project

Independent study will form a large part of these modules and will consist of literature searching, critical evaluation of the literature, writing the research proposal, experimental work and data collection. This spans all three years of the programme, with a phased activity. Year one will be the period during which a student identifies a research area and selects a potential research project (with suitable guidance). During this year they will research the relevant literature and formulate a pertinent research question, culminating in a hypotheses and aims and objectives. The literature review will be assessed at the end of the first year.

During the second year the students undertake a module which is aimed at introducing the students to research methods in dentistry. This will help them develop a research protocol, which forms part of the assessment in this module, which occurs at the end of the first semester of the second year. A further module takes place during the second year and this is entitled 'experimental work-data collection'. This unit aims to develop the student's general ability in the creation and interpretation of new knowledge, through original research demonstrating a detailed understanding of applicable techniques of research methods including undertaking experiments and data collection, and the ability to adjust the project in the light of unforeseen problems. This will be examined at the end of the second semester of the second year, by submission of the materials and methods and an oral presentation giving an update of the project progress.

The third year will include the write up of the project, which will be assessed at the end of the third year. This unit aims to develop the student's general ability in the creation and interpretation of new knowledge, through original research by demonstrating a detailed analytical understanding of the investigations undertaken and the interpretation of data. This should lead to the construction and exposition of knowledge that has been acquired, and that will extend knowledge at the forefront of the discipline and be of a quality that will satisfy peer review and merit publication.

Provision for acquisition of information literacy skills have been planned with the Faculty Librarian for Medicine. The delivery of these 'information literacy skill' sessions will be carefully timetabled and integrated within the curriculum, at a time to suit the student's needs.

Supervisors will provide appropriate training and monitoring in the early stages. Tutorial meetings will be arranged with project supervisors to discuss progress and give guidance. Where appropriate other experts, such as statisticians will be consulted to enhance data handling facilitating subsequent analysis. Ad hoc tutorials may be arranged with these experts. Writing up the research as a final project report and as a paper for submission to a scientific journal will be mentored by the project supervisor. (K8, S3, S6-S8, S16).

Audit/Governance

The students will be expected to attend and contribute to the departmental journal clubs. They will also be required to attend departmental audit meetings and annual updates on dealing with medical emergencies, clinical governance and waste management provided by the STH NHS Trust. They will undertake an audit project. (S5, S15-S17).

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

Formative assessments: Monitoring of student progress is by a process of continuous assessment. Procedures in the clinical skills lab and the clinical area will be graded and recorded in the student's logbook. Students are encouraged to self assess and feedback will be given on these procedures. In the first year the students undertake modules which involve training in the major restorative techniques. This period provides a benchmark of the student's existing abilities and identifies areas of knowledge or skill which might require particular attention. Subject to satisfactory performance students will be allowed to begin patient treatment. This is largely achieved through attaining competency in the restorative procedures and will be assessed by a range of techniques including directly observed clinical procedures (DOPs) and Mini Clinical Evaluation Exercises (MiniCex) as per the requirements of the General Dental Council Guidelines in the Mono-specialty curricular.

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

- Written examination papers in the form of structured short answer questions.
- Annotated bibliographies which will be presented in the written form, with selected aspects being presented orally.
- Oral and written presentation of research and audit 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.

The award of the degree will depend upon satisfactory performance in all the 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/>

The European Federation of Periodontology guide "Graduate Programme in Periodontology".
<http://www.efp.org/>

Accreditation of postgraduate speciality training programmes in Endodontology. Minimum criteria for training Specialists in Endodontology within Europe (International Endodontic Journal, 43, 725–737, 2010)

General Dental Council's Lifelong Learning Statement <https://www.gdc-uk.org/professionals/cpd>

General Dental Council's Curriculum (June 2010) for Specialty Training in: Endodontics, Periodontics or Prosthodontics.

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 Learning and Teaching Strategy of the University of Sheffield
<https://www.sheffield.ac.uk/staff/learning-teaching/our-approach>

The guidelines of master's level courses within the Faculties of Medicine and Science at the University of Sheffield

20. Programme structure and regulations

The course runs from September to September and is undertaken full time in three academic years (a part time equivalent is available over 4 years). The candidate will need to complete the Final Examination for the Degree before completion. The course consists of two 15 week semesters (October to January, January to July) followed by a period from July to September for completion of clinical work and the 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 three years full-time (or a part-time equivalent, which would normally be 4 years).

3. A candidate shall take:

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| (Year 1) | RSD 617 | Principles of Periodontal Treatment | 15 |
| | RSD 618 | Principles of Endodontic treatment | 15 |
| | RSD 619 | Principles of Conservative Dentistry | 60 |
| | RSD 622 | Management of the partially dentate patient I | 30 |
| | RSD 623 | Research Project: Literature Review | 30 |
| | RSD 624 | Clinical practice programme New patient I | 30 |
| Totals | | | 180 |

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| (Year 2) | DEN 601 | Research Methods in Clinical Dentistry | 15 |
| | DEN 602 | Principles of Clinical Management | 15 |
| | RSD 625 | Research Project: Experimental Work | 15 |
| | RSD 626 | Clinical practice programme New patient II | 30 |
| | RSD 6101 | Specialty Programme 1 out of | 45 |
| | RSD 6301 | Endodontics, Periodontics or Prosthodontics | |
| | RSD 6501 | | |
| | RSD 627 | Clinical practice programme TOP I | 60 |
| Totals | | | 180 |

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| (Year 3) | RSD 628 | Clinical practice programme New patient III | 60 |
| | RSD 629 | Research Project: completion & write up | 45 |
| | RSD 6201 | Specialty Programme 1 out of | 15 |
| | RSD 6401 | Endodontics, Periodontics or Prosthodontics | |
| | RSD 6601 | | |
| | RSD 630 | Clinical practice programme TOP II | 60 |
| Totals | | | 180 |

Please refer to the [Programme Regulations](#) and the [General University Regulations](#) for detailed information about the structure of programmes and regulations concerning assessment.

21. Student development over the course of study

The small numbers of students on the course and frequent contact with tutors means that assessment and feedback is a regular process. All clinical tasks are assessed and represent part of formative assessment and feedback. This means students have regular feedback on their progress and development throughout the course of study. More formal assessments are arranged through the demonstration of competency at DOPs, CBD's and MiniCex and the module assessments. Students will be expected to progress over the three years from basic procedures, within the competency of a general practitioner, to procedures and standards expected of a specialist. Satisfactory attainment of competencies and progression will be evaluated each semester.

Satisfactory clinical performance during the first year will allow the student to continue the course. Failure at this stage of the course will prevent the student from undertaking clinical work and may result in the student being advised to leave the course.

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

22. Criteria for admission to the programme

Detailed information regarding admission to programmes is available at <http://www.sheffield.ac.uk/dentalschool/masters/dclindent>. The Doctorate of Clinical Dentistry (Restorative) course is aimed at dental surgeons holding a primary dental degree with at least two years experience in hospital or general dental practice. International students whose first language is not English are required to provide an appropriate English Language qualification. We ask for 7.0 overall IELTS score with a minimum of 6.0 in each component or TOEFL equivalent.

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 2012 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. The School has wireless connectivity and postgraduate students all have access to study rooms and computer facilities.

On the second floor 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 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 Charles Clifford Dental Hospital. A redevelopment completed in 2009 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 service to Trust patients. All These 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.

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

This specification represents a concise statement about the main features of the programme and should be considered alongside other sources of information provided by the teaching department(s) and the University. In addition to programme specific information, further information about studying at The University of Sheffield can be accessed via our Student Services web site at <http://www.shef.ac.uk/ssid>.