10 Programme Aims
The aim of the course is to enable dentists to acquire advanced skills and knowledge in the field of Restorative Dentistry. The course is designed to provide a foundation for:

1. Enhanced general dental practice;
2. Specialist practice (overseas – where regulatory authorities may consider the degree as part of an applicant’s portfolio of experience);
3. Specialist training in Restorative Dentistry (in conjunction with the first 2 years of a 5-year NHS Specialty Registrar programme);
4. Specialist training in the Distinctive Specialities of Endodontology, Periodontology and Prosthodontics (the first two years of a three-year full-time or four-year p/t programme);
5. Clinical academia;
6. Community Dental Services.

11 Learning Outcomes
The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas.

Knowledge and Understanding
On completing the programme students should have:
A1 A systematic understanding of knowledge within and directly related to Restorative Dentistry, and a critical awareness of current problems and new insights, much of which is at, or informed by, the forefront of the field of study and area of professional practice;
A2. A comprehensive understanding of techniques applicable to restorative clinical practice and their own research;
A3. Originality in the application of clinical and scientific knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline.

Teaching and Learning Methods
Teaching strategy
Teaching for A1 is mainly by pre-arranged seminars with the majority completed during the first year of the programme. Each seminar has a structured reading list prioritised where necessary into essential and recommended reading. These lists are reviewed annually. For items A2, A3 Students build their clinical experience whilst treating patients with more complex restorative problems with feedback given on every clinical episode. Students
engage in a research dissertation and statistics/research methodology course. Students are expected to attend the Dental Hospital Clinical Governance meetings and specialist diagnostic clinics.

Learning strategy
Students are expected to have undertaken prior reading for each seminar and to engage in seminar discussion. Each student has a research project and is allocated suitable patients for extending their experience and skills in diagnosis and delivery of treatment.

Assessment Strategy
A1 is assessed at the end of the first year by open book essays, a multiple choice paper and a short answer paper. Further essays are set during the second year. Practice questions are available in the run-up to the written examination. Assessment of clinical knowledge is described below. The dissertation literature review is formatively assessed internally at the end of the first year and the whole dissertation examined at the end of the second year.

Intellectual Skills
On completing the programme students should be able to:
B1 Evaluate critically current research and advanced scholarship in the discipline;
B2 Evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses;
B3 Synthesise clinical findings to make a diagnosis and treatment plan or plan patient follow-up;
B4 Appreciate their limitations and to take advice or refer a patient when appropriate.

Teaching and Learning Methods
As for A1-A3 as above for Knowledge and Understanding. B4 developed clinically.

Assessment Strategy
As for knowledge and understanding and practical skills.

Practical Skills
On completing the programme students should be able to:
C1 Record a history and examine patients with complex restorative requirements;
C2 Provide treatment for restorative patients with moderate to difficult requirements;
C3 Articulate casts, diagnostically wax and construct indirect restorations;
C4 Use statistical packages for data analysis.

Teaching and Learning Methods
One to one teaching on treatment clinics and diagnostic clinics (C1, C2). Supervised laboratory work (C3). A statistical course and hands on sessions (arranged on the same basis as research students) when analysing the research project (C4).

Assessment Strategy
Students’ clinical skills are evaluated summatively at the end of the first term in the Clinical Skills Unit; a satisfactory performance on the clinical simulator is needed before progressing to clinical activity. Clinical activity is evaluated both formatively and summatively. A formative grade is given for each patient episode of clinical activity. A summative assessment of treated cases is made by the internal examiners at the end of years 1 and 2 (C1 and C2). First year students present clinical cases exhibiting an overall satisfactory performance in treatment quality and clinical knowledge before being allowed to progress to the second year. Second year students need to present clinical cases exhibiting an overall satisfactory performance in treatment quality and clinical knowledge in order to pass the clinical component of the final examination. This component includes a log of a completed ‘best case’ presented along with the patient at the end of year 2. The research project is normally examined at the end of year 2.

Transferable/Key Skills
On completing the programme students should be able to:
D1 Use appropriate IT skills for data analysis and documentation;
D2 Use efficiently the library and other information retrieval systems;
D3 Realise that academic and clinical skills need to be constantly reviewed, challenged and updated through continuing professional development in which you should play an active part in both receipt and delivery;
D4 Work in harmony with peers, support staff and teachers with a view to becoming a team leader. Holders of the MClinDent will have the qualities and transferable skills necessary for employment / further study requiring: the exercise of initiative and personal responsibility;
- decision-making in complex and unpredictable situations; and
- the independent learning ability required for continuing professional development.

Teaching and Learning Methods
D 1, 2 Word processing, library skills and Medline during induction week. Advanced word processing and use of Endnote bibliographic software during term 2 or 3 in conjunction with literature review writing. Statistical course (term 2) and statistics applied to research project (terms 2-6). Teaching experience of undergraduates organised during terms 2 and 3 of second year (D3). Students expected to organise their own clinical practice to meet assessment targets (D4). Students encouraged to lead some of their seminars, e.g. in Dental Materials Science (D4).

Learning strategy
Problem based in relation to tackling research project, presenting seminars and developing clinical practice.

Assessment Strategy
Assessment of research project described in C. Constructive feedback on clinical performance, clinical teaching and seminar presentation.

12 Programme Curriculum, Structure and Features
Basic structure of the programme
The foundation for clinical and laboratory practice consists of three clinical skills courses completed during the first term. There is also a laboratory course which the student must complete satisfactorily. Students must obtain a satisfactory standard in the Fixed and Removable Clinical Skills programme before being allowed to treat patients under supervision from the start of second term. During terms 2, 3 and 4 students see patients for treatment in the following clinical disciplines: Prosthodontics (including Conservation), Endodontics and Periodontics. This will continue during terms 5 and 6 wider focus on general restorative cases for treatment (3 sessions per week) to consolidate experience in readiness for the clinical presentation and oral examinations normally in September of the second year. In addition, Diagnostic Clinics are specifically timetabled for full-time students as are observation on undergraduate teaching clinical teaching sessions during the second year.

The seminar programme is based on 8 compulsory elements:
Conservation and Fixed Prosthodontics Complete Prosthodontics
Dental Materials Science Endodontology
Interrelated subjects Periodontology
Partial dentures Statistics.

The research project is undertaken over both years of the programme. During the first year aims, literature and pilot studies should ideally be completed. Practical work may be spread over both years and writing-up completed by the beginning of August of the second year.
Key features of the programme (including what makes the programme distinctive)

<table>
<thead>
<tr>
<th>The two-year programme (6 terms) comprises three main areas:</th>
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<tr>
<td>1. Supervised clinical and laboratory practice involving clinical skills training, diagnostic clinics, treatment planning, provision of clinical procedures and technical work for selected cases, including some complex treatments. Clinically related activity including clinical teaching experience and observation of consultant treatment sessions comprises no more than 60% of sessional time over the entirety of the programme.</td>
</tr>
<tr>
<td>2. Review of the clinical and scientific evidence base for Restorative Dentistry by means of seminars, lectures and practical classes.</td>
</tr>
<tr>
<td>3. A research project and dissertation demonstrating a candidate’s application of scientific method to a problem of relevance (directly or indirectly) to Restorative Dentistry.</td>
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</table>

Students can expect a high degree of clinical exposure under expert tuition. There is excellent technical support and students are encouraged to liaise with the restorative dentistry laboratories and staff as well as do their own mountings, trial adjustments and diagnostic waxing. Students are not expected to undertake laborious repetition of technical procedures. The dissertation for the research project is written up as a paper for submission to a journal in combination with a full introduction and literature review. This approach will facilitate the candidate getting the work published and the scrutiny of the research log book will encourage good record keeping.

The programme is normally undertaken full-time but may be taken on a part-time basis by NHS Specialty Registrars in Restorative Dentistry. This is only if they are able to present clinical cases carried out as part of their NHS clinical training. The DPD may use discretion in special circumstances to apply this provision to other dentists practising in the UK.

Graduates may apply on an individual basis for entry to the MRD examination (Membership in Restorative Dentistry) held by the Royal College of Surgeons, Edinburgh. The MClinDent programme has previously be considered as counting as two years towards the specified three years of clinical training required for eligibility to sit the MRD.

Programme regulations (link to on-line version)

- [R5008F_5008P_vFinal.pdf](R5008F_5008P_vFinal.pdf)

13 Support for Student Learning
For information on support for student learning please see link below:

https://www.ncl.ac.uk/ltds/assets/documents/qsh_progspec_generic_info.pdf

14 Methods for evaluating and improving the quality and standards of teaching and learning
For information on methods for evaluating and improving the quality and standards of teaching and learning please select link below:

https://www.ncl.ac.uk/ltds/assets/documents/qsh_progspec_generic_info.pdf

15 Regulation of assessment
For information on regulation of assessment please select link below:

https://www.ncl.ac.uk/ltds/assets/documents/qsh_progspec_generic_info.pdf
The University Prospectus: [http://www.ncl.ac.uk/postgraduate/courses/](http://www.ncl.ac.uk/postgraduate/courses/)

Degree Programme and University Regulations: [http://www.ncl.ac.uk/regulations/docs/](http://www.ncl.ac.uk/regulations/docs/)

Please note. This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical student might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided.