Programme specification for Research Degrees
Professional Doctorates

Programme definition approved by Senate June 2014
A professional doctorate is defined as a programme that requires the creation and interpretation of new knowledge, through original research, advanced scholarship and innovations in professional practice. A professional doctorate programme differs from a ‘traditional-route’ research degree programme (a PhD) in that candidates are required to make both a theoretical and applied (within the context of the relevant profession or specialism) contribution to knowledge.

<table>
<thead>
<tr>
<th>Programme title</th>
<th>Doctorate of Clinical Dentistry (DClinDent) in Orthodontics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible school(s)/ institute(s) (please identify lead dept)</td>
<td>Institute of Dentistry</td>
</tr>
<tr>
<td>Name &amp; contact details of lead co-ordinator</td>
<td>Prof Padhraig Fleming</td>
</tr>
<tr>
<td>Programme duration (FT/PT)</td>
<td>FT: 3 years</td>
</tr>
<tr>
<td>Name of final award</td>
<td>DClinDent</td>
</tr>
<tr>
<td>FHEQ level of final award</td>
<td>8</td>
</tr>
<tr>
<td>Name of interim / exit award (e.g. if candidates leave after taught programme)</td>
<td>Pg Cert (60 credits) Pg Dip (120 credits) MSc (180 credits) MClinDent (360 credits)</td>
</tr>
<tr>
<td>Name of Subject Examination Board that will confirm taught module results</td>
<td>Orthodontics (PGT)</td>
</tr>
<tr>
<td>FHEQ level of interim award</td>
<td>7</td>
</tr>
<tr>
<td>Start date for first cohort</td>
<td>Sep 2019</td>
</tr>
</tbody>
</table>

Programme outline and aims
This programme is jointly accommodated by the Institute of Dentistry, Bart’s and The London School of Medicine & Dentistry, and Bart’s and The London Dental Hospital, Bart’s Health NHS Trust.

The programme aims are to:
- Develop qualified dentist’s clinical practice and academic knowledge to a FHEQ level 8 according to the framework for higher education qualifications in England, Wales and Northern Ireland (2008)
- Meet the national and international need for more specialists in Orthodontics
- Offer comprehensive, contemporary and novel knowledge in Orthodontics to a specialist level;
- Provide advanced training to dentists wishing to attain clinical expertise and proficiency in Orthodontics to specialist level
- Prepare dentists to be eligible for formal recognition as a Specialist in Orthodontics by the UK regulatory bodies
• Promote a critical approach to evaluating relevant literature so as to enable evidence-based practice and novel practices in Orthodontics to specialist level
• Embed the foundations of research
• Instil the need for continuing professional development and lifelong learning

Learning Outcomes:
The learning outcomes reflect the Curriculum for Specialist Training in Orthodontics produced by the Specialist Advisory Committee of the Royal Colleges’ and approved by the General Dental Council (UK), the relevant QAA benchmark statements and The Framework for Higher Education Qualifications in England, Wales and Northern Ireland (2008) and are guided by the Queen Mary Statement of Graduate Attributes.

At the end of the programme the student will be able to:
• Demonstrate the possession of an in-depth and extensive current knowledge in Orthodontics to specialist level;
• Undertake independent and proficient clinical practice to specialist level in either primary or secondary care settings
• Accept primary care referrals for advice and treatment in Orthodontics
• Relate Orthodontic care to other dental and medical specialties
• Utilise problem-solving and decision-making skills to assess, diagnose and treatment plan advanced, multi-disciplinary and complex patient care
• Understand and analyse the literature and research bases for evidence-based clinical care
• Plan and perform research including clinical audits
• Communicate effectively and interact with patients and colleagues in other dental and medical specialties
• Become eligible for entry to sit the membership examination of the Dental Faculties of the Surgical Royal Colleges in Orthodontics.

Entry requirements
What are the minimum entry requirements and selection criteria for admission?
• A recognised dental degree (BDS or equivalent) and two years full time equivalent of post-qualification experience working as a dental surgeon, with at least 6 months experience in Paediatric Dentistry and/or Oral Surgery.
• Where English is a foreign language the entry requirement will be an IELTS of 7.0 overall with not less than 6.5 in every skill, or equivalent.
• For candidates seeking a Certificate of Completion of Specialist Training (CCST), they must hold a Specialist Registrar (StR) post with an NTN (National Training Number). These candidates will only be accepted for FT study under postgraduate training arrangements agreed with Higher Education England.

Programme structure (overview)
The three components of the programme are:
• A programme of seminars, practical exercises and didactic teaching commencing with an introductory course and reviewing the clinical and scientific scope of the subject to determine its evidence base.
• Supervised clinical and as appropriate laboratory practice in which treatment planning and clinical procedures are performed for selected cases, including a number of complex treatments.
A research investigation leading to a dissertation in which the candidate is required to demonstrate the application of scientific method to a problem of relevance to the subject area.

The three years of full-time study will provide 540 credits of which 270 credits are directed study element and 270 credits are research element. The indicative components are in the following table. Please note that in research degrees, credits are not given for research. Hence "notional credits" are allocated to give an indication of time and effort spent by students.

<table>
<thead>
<tr>
<th>Module Number</th>
<th>Module</th>
<th>Credit</th>
<th>Mode</th>
<th>FHEQ Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - DIN7821</td>
<td>Core Knowledge and Clinical skill in Orthodontics</td>
<td>60</td>
<td>PGT</td>
<td>7</td>
</tr>
<tr>
<td>2 - DIN8101</td>
<td>Research I –Research Project progression report I + Clinical Portfolio initial report.</td>
<td>30</td>
<td>PGR</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 - DIN8102</td>
<td>Advanced Clinical Skill and Science and in Orthodontics</td>
<td>90</td>
<td>PGT</td>
<td>8</td>
</tr>
<tr>
<td>4 - DIN8103</td>
<td>Research II - Research Project progression report II + Clinical Portfolio and Service Evaluation preliminary reports.</td>
<td>30</td>
<td>PGR</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - DIN8104</td>
<td>Consolidated Clinical Skills, Multidisciplinary Care and Science in Orthodontics</td>
<td>120</td>
<td>PGT</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>330</td>
<td></td>
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</tbody>
</table>

Additional comments:

**Modules and assessment**

The programme aims to promote teaching, learning and research enriched by original scholarship to encourage students to become independent learners. Students will accept responsibility for their own learning and will be encouraged to develop powers of critical thought and reflection. Key skills in information technology and oral and written presentations will be enhanced. The course will offer students the opportunity to enhance their knowledge and clinical skills in orthodontics and become familiar with the issues of study design, data analysis and critical thought. Assessments are outlined below.

In addition to the formal seminar and clinical programme, time is set aside for review, discussion and problem solving to support student research projects, for innovative practical exercises, clinical audit and for feedback and evaluation of the course itself. Students receive a comprehensive reading list at the start of the programme.

The course aims to offer a high teacher/student ratio so that access to advice and ease of communication can be assured. Clinical sessions will be supervised by experienced...
clinical academics and NHS staff. Two staff members will supervise each student research project.

**Assessment**
- **Summative Assessment Methods and Procedure**

<table>
<thead>
<tr>
<th>Year</th>
<th>Module</th>
<th>Credit</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DIN7821 - Core Knowledge and Clinical skill in Orthodontics</td>
<td>60</td>
<td>Written examination – 100%</td>
</tr>
</tbody>
</table>
| 2    | DIN8101 - Research I – Research Project progression report I + Clinical Portfolio initial report. | 30     | Progression Assessment on Research Project – 60%  
Progression Assessment on Clinical Portfolio – 40% |
| 3    | DIN8102 - Advanced Clinical Skill and Science and in Orthodontics | 90     | Written examination – 75%  
Oral examination (Diagnostic) – 25% |
| 4    | DIN8103 - Research II - Research Project progression report II + Clinical Portfolio and Service Evaluation preliminary reports. | 30     | Progression Assessment on Research Project – 40%  
Progression Assessment on Clinical Portfolio – 30%  
Progression Assessment on Service Evaluation – 30% |
| 5    | DIN8104 - Consolidated Clinical Skills, Multidisciplinary Care and Science in Orthodontics | 120    | Written examination – 50%  
Oral examination (Diagnostic) – 50% |
Dissertation on Clinical Portfolio – 40%  
Dissertation on Service Evaluation – 20% |

Assessments are managed QMUL examination board and an external examiner (appointed according to QMUL regulations) will moderate achievement within and between different courses. As this is a hybrid programme, assessment procedures will be managed internally both by the teaching and research faculties and externally through an external examiner. The assessments take place over three years for full time students. For the taught component, the students will be examined at the end of each year according to PGT regulations. For the research element, the students will be examined in a manner similar to the 9 and 18 months progressions in the first 2 years, and the final Dissertation at the end of the third year, according to the PGR regulations.

The assessment structures are in the following table. All the modules are core and students must pass all modules to gain an overall pass.
• **Grading Criteria for Summative Assessments**

The grading criteria for the taught components will follow the QMUL regulations. However, as this is a research degree, the final grade will either be a pass or fail.

• **Appointment of external examiners**

The appointment of external examiner will follow the QMUL procedures.

• **Marking and Moderating**

Students will be required to make clear declarations as to the originality of the work submitted for the in-course assessment and the project dissertation.

The written examination paper will be doubled marked by two internal examiners and moderated by an external examiner. The oral examinations for the PGT and PGR components will be marked one internal and one external examiner. At the discretion of the examiners and providing the examination regulations allow, a student may be given credit for one part of the examination and asked to redo the others.

• **Feedback to Students**

Formative assessment exercises with feedbacks are carried out during the course. Students will have to carry out clinical work base assessments. They may be required to submit several short essays (up to 2000 words) on a variety of topics to be determined by teaching staff. The students will have opportunity to give oral presentations based on progress in the research projects, clinical audits and clinical works. Candidates will have regular 1:1 contact with clinical tutors and supervisors. Their reflective logs will regularly be reviewed and discussed. Clinical supervisors will also monitor that candidates have an appropriate case load and patient mix in line, where required, with Royal College and NHS Guidelines.

• **Extensions and Deferrals, and Extenuating Circumstances**

In extreme circumstances, where medical circumstances may have adversely affected examination performance, a medical certificate should be presented to the Course Organiser. Any other extenuating circumstance for extensions and deferrals must be submitted to the Subject Examination Board for consideration according to the QMUL regulations.

Students with disability will be offered assistance by QMUL Disability And Dyslexia Service.

• **Supervision: Academic and Clinical**

The research components will be supervised by QMUL research active academic staff. The taught and clinical components will be supervised by both QMUL and Barts Health clinical specialists.

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**Research**

This professional doctorate programme follows the FHEQ level 8 descriptor which is to:
‘make a significant and original contribution to a specialised field of inquiry, demonstrating a command of methodological issues and engaging in critical dialogue with peers and accepting full accountability for outcomes’.

The research component in this programme differs from that of the traditional hypothesis driven PhD format as it has an application of knowledge to clinical practice. It is composed of three parts:

1. Research project report – the candidates are to produce a traditional research thesis to demonstrate they can critical review scientific literature and carry out a hypothesis base research. They must produce dissertations that are of publishable standard. The dissertation must not exceed 50,000 words. Two supervisors will be assigned for each student. The project may include development of a new dental material, dental caries progression and prevention, dental genetics, meta- analysis and systematic reviews, and other related projects that fulfil the QAA level 8 criteria.

2. Clinical portfolio report – the candidates are to produce a portfolio report of 4 clinical cases covering the full breadth and depth of paediatric dentistry of patients whom they have treated during their training. The portfolio must include detail documentation of the treatments that they have provided, a critical appraisal, including evidence base analysis, of the treatments, the novelty of the treatments, evaluation of its success and proposal of future follow-up. A summary of how their cases contribute to the advanced/innovative practice in paediatric dentistry. This report must not exceed 10,000 words.

3. Service evaluation - the candidates are to produce a service evaluation report (e.g. clinical audit) that they have designed and carried out. This report must include aims, methods, results and discussion with proposal for future audit and research in the field. Two cycles of audits must be completed. This report must not exceed 10,000 words.

Links with external partners
Nil

Links to college policies
The programme should be designed and administered with reference to the following documents:

Academic Regulations
http://www.arcs.qmul.ac.uk/policy/index.html

Code of Practice for Research Degree Students –
http://www.arcs.qmul.ac.uk/research-degrees/research-degree-students/index.html

Research Development Framework –
http://capd.qmul.ac.uk/what-we-offer/researcher-development/

Support for students with disabilities, SpLD and mental health issues -
http://www.dds.qmul.ac.uk/

Student Appeals and Complaints Policy
http://www.arcs.qmul.ac.uk/students/student-appeals/index.html
and
http://www.arcs.qmul.ac.uk/students/student-appeals/complaints/

| Person completing programme specification | Mrs. Lorraine Low  
|                                           | Senior Quality Assurance Administrator |
| Person responsible for management of research degree programme | Prof Padhraig Fleming |
| Date programme specification produced/amended by School/Institute/Lead Department | 16/01/2019 |
| Date programme specification approved by Research Degree Programmes and Examinations Board | 2015 |