This document provides a definitive record of the main features of the programme and the learning outcomes that a typical student may reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities provided. This programme specification is primarily intended as a reference point for academic and support staff involved in delivering the programme and enabling student development and achievement, for its assessment by internal and external examiners, and in subsequent monitoring and review.

**Programme Information**

<table>
<thead>
<tr>
<th>Programme Title</th>
<th>Digital Health Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Award(s)</td>
<td>MSc</td>
</tr>
<tr>
<td>Postgraduate Diploma (PG Dip)</td>
<td></td>
</tr>
<tr>
<td>Programme Code(s)</td>
<td>A3DHM</td>
</tr>
<tr>
<td></td>
<td>A3DHD</td>
</tr>
<tr>
<td>Awarding Institution</td>
<td>Imperial College London</td>
</tr>
<tr>
<td>Teaching Institution</td>
<td>Imperial College London with contributions from University of Edinburgh</td>
</tr>
<tr>
<td>Faculty</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>Department</td>
<td>Surgery and Cancer</td>
</tr>
<tr>
<td>Main Location of Study</td>
<td>Online with work-based learning and short residential locations at St Mary’s and other off-site locations (e.g. London, Manchester and Scotland)</td>
</tr>
<tr>
<td>Mode and Period of Study</td>
<td>MSc: part-time over 24 months</td>
</tr>
<tr>
<td></td>
<td>PG Dip: part-time over 12 months</td>
</tr>
<tr>
<td>Cohort Entry Points</td>
<td>Annually in March</td>
</tr>
<tr>
<td>Relevant QAA Benchmark Statement(s) and/or other external reference points</td>
<td>- Making IT Work: Harnessing the power of health information technology to improve care in England</td>
</tr>
<tr>
<td></td>
<td>- NHS England’s Request for Proposal for NHS Digital Academy delivery partner</td>
</tr>
<tr>
<td>Total Credits</td>
<td>PG Dip</td>
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<tr>
<td></td>
<td>MSc</td>
</tr>
<tr>
<td>FHEQ Level</td>
<td>Level 7 - Master’s</td>
</tr>
<tr>
<td>EHEA Level</td>
<td>2nd cycle</td>
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</table>
The Digital Health Leadership programme is an innovative, high-profile offering developed in partnership with NHS England in the context of the new NHS Digital Academy (NHSDA). The purpose of the NHSDA is to support, nurture and develop Chief Clinical Information Officers (CCIOs), Chief Information Officers (CIOs) and aspirant informatics/digital leaders, with the objective of increasing the professionalism, capability and capacity of this workforce.

The Institute of Global Health Innovation (IGHI) at Imperial College London (ICL) has been awarded a grant of £6 million to develop the programme and cover tuition for up to 300 UK-based participants (NHS employees) over the three years 2018-21. Three cohorts of around 100 students each are expected. The University of Edinburgh, Harvard Medical School and Imperial College Healthcare NHS Trust are partners in the grant and contribute faculty members and content.

As part of the NHSDA, we are offering a 12-month blended learning Postgraduate Diploma in Digital Health Leadership (60 ECTS), with the possibility to progress to a Master of Science subject to the completion of a research project of a 10,000 word final report (30 ECTS).

The Postgraduate Diploma will include the following 6 modules:
1. Essentials of health systems
2. Adopting and tailoring the project and programme lifecycle
3. Health information systems and technologies
4. User-centred design and citizen-driven informatics
5. Decision support, knowledge management and actionable data analytics
6. Leadership and transformational change

The programme employs a blended learning approach, including online and residential learning. The online component of the programme uses the best-in-class platforms to deliver an exemplary digital experience to participants. Residential learning will take place across various sites, including London, Manchester and Scotland. Students are supported by experienced academics and other members of staff, from IGHI and the other partners. Industry partners are involved as faculty and as mentors for participants.

The learning experience is tied to a workplace project so that participants can practically apply the skills and knowledge they will acquire. We expect that up to 50% of students’ working hours will be spent on activities that are relevant for the programme.

While the programme has been created for a specific UK-based audience, we expect it to attract significant interest beyond the 300 funded participants and internationally.
Learning Outcomes

The programme aims to train Health Informatics (HI) leaders. On successful completion of the **PG Diploma**, attendees will possess essential knowledge, skills and experience to work as HI leaders driving digital health transformation in the NHS, through the following outcomes:

- Develop expertise in identifying appropriate clinical and non-clinical data sources, and applying the most appropriate analytical technique for the context and requirements
- Apply insights into the role of information systems on the co-production of care between patients and the health system
- Identify opportunities for digital transformation, taking business, staff and patient needs into consideration
- Evaluate and implement health information systems, including using clinical data and insights to drive continuous improvement, informatics solutions and procurement decisions
- Re-engineer healthcare processes, taking into account how information systems and processes enhance or compromise the decision making and actions of healthcare team members and patients
- Lead organisational change, fostering multidisciplinary collaboration, communicating effectively, and managing large-scale projects related to clinical information and health IT systems
- Scope, design, manage and implement a large scale digital transformation project in the workplace

Those students who continue to pursue an **MSc** will also complete a research project, demonstrating critical thinking and resulting in new knowledge in the field of HI, through the following outcomes:

- (As for PG Diploma, plus the following)
- Collect and analyse quantitative data on a workplace project’s context, business case and implementation process.
- Critically appraise the business plan and implementation of the workplace project.
- Synthesise the key findings from the analysis and extrapolate the lessons learned from the project into a set of recommendations for other organisations and for the health system as a whole

The Imperial Graduate Attributes are a set of core competencies, which we expect students to achieve through completion of any Imperial College degree programme. The Graduate Attributes are available at: [www.imperial.ac.uk/students/academic-support/graduate-attributes](http://www.imperial.ac.uk/students/academic-support/graduate-attributes)

### Entry Requirements

**Academic Requirement**

- A UK Bachelor’s degree with Honours in a relevant degree subject or a comparable qualification recognised by the College (minimum level - 2:2)

**Non-academic Requirements**

- Current NHS employee
- 2-3 years’ experience working in a Digital Health context or related area
- Personal Statement - this should set out your experience to date and why you feel you would be particularly suited to the programme (4000 characters max.)
- Shortlist of current workplace projects that will be relevant for the programme
| English Language Requirement | **Standard requirement**  
IELTS score of 6.5 overall (minimum 6.0 in all elements) |
|-----------------------------|--------------------------------------------------|

Applicants who do not meet the academic requirements above but who have substantial relevant industry experience may be admitted following completion of a ‘Special Qualifying Exam’ (SQE).

Students may be invited to attend a post-application interview.

The programme’s competency standards documents can be found at: TBD

### Learning & Teaching Strategy

#### Scheduled Learning & Teaching Methods
- The programme will feature 12 days of in-person teaching and learning, and will include the following:
  - Lectures
  - Interactive workshops
  - Group work

#### E-learning & Blended Learning Methods
- The programme prominently features online learning, using best-in-class digital learning platforms
- The majority of the modules in the programme are delivered online
- Online learning is based on the latest technology and relevant pedagogy principles

#### Project Learning Methods
- Each student will need to identify a workplace project that will be enhanced by knowledge and skills gained throughout the programme
- This will have to be a top organisational priority, with an executive level sponsor, and something the students will spend up to 50% of their working hours on.
- Throughout the programme, students will apply lessons learnt to their on-going workplace project and reflect on the outcomes via essays and other submissions
- The research project for the programme will also be related to the project (MSc students only)

#### Placement Learning Methods
- Students will participate in the programme while continuing their job
- The workplace project will be a core part of both their job and this programme
- We therefore expect that up to 50% of students’ working hours will be spent on activities that are relevant for the programme

#### Assessment Strategy
Assessment Methods

The programme will employ a variety of formative and summative assessments. The latter will include:

- Scenario-based multiple choice assessments
- Engagement and participation in the Online Platform
- Reflective essays relating to the application of skills acquired during the programme to workplace projects
- Blog posts and videos assessed against learning outcomes
- Practical exercises at residential and write-ups of these exercises
- Structured essay outlining a personal leadership development plan
- Collaborative group exercises
- Participation in group work and interactive residential sessions
- Research Project: A final report (up to 10,000 words) on the workplace project and the lessons learnt (MSc students only)

Academic Feedback Policy

Students will be provided feedback from each of their coursework assessments throughout the programme. Teaching fellows will be available to provide additional feedback and tutoring. This feedback will allow students to self-evaluate their progress throughout the programme.

Students will receive their indicative grades for their module assignments within three weeks of the assignment deadline.

There are a number of interactive sessions throughout the programme, which are not formally assessed, but which will allow students to receive feedback from group leaders and their peers. The research project (MSc students only) will be supported by the faculty for periodic feedback. Feedback will be provided through structured forms to ensure that participants receive all the information they need in a robust format.

Re-sit Policy

Students who fail an assessment will have the opportunity to re-submit. This will allow students who fail a component of their module assessment to progress in a timely manner. For students that fail group work or participation assessments an alternative assessment may be required.

MSc students that fail their final research project will have an opportunity to re-submit their project at a later date to be agreed with the Programme Director. This may mean that the project will not be considered until the Examination Board the following year.

Re-submissions are normally capped at the pass mark.

Mitigating Circumstances Policy


Programme Structure

<table>
<thead>
<tr>
<th>Module number</th>
<th>Module name</th>
<th>Timing of delivery (approximate)</th>
<th>Number of credits (ECTS)</th>
<th>Delivery model</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Essentials of health</td>
<td>Month 1-2 of the programme</td>
<td>5</td>
<td>Online learning</td>
</tr>
<tr>
<td></td>
<td>systems</td>
<td></td>
<td>ECTS</td>
<td>Weighting</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>2</td>
<td>Adopting and tailoring the project and programme lifecycle</td>
<td>Online learning in months 3-4 of the programme, with face-to-face teaching and assessments throughout the 12 months</td>
<td>10</td>
<td>Blended learning</td>
</tr>
<tr>
<td>3</td>
<td>Health information systems and technologies</td>
<td>Month 5-7 of the programme</td>
<td>10</td>
<td>Blended learning</td>
</tr>
<tr>
<td>4</td>
<td>User-centred design and citizen-driven informatics</td>
<td>Online learning in months 7-9 of the programme, with face-to-face teaching and assessments in residential learning session in month 10 of the programme</td>
<td>10</td>
<td>Blended learning</td>
</tr>
<tr>
<td>5</td>
<td>Decision support, knowledge management and actionable data analytics</td>
<td>Month 10-11 of the programme</td>
<td>10</td>
<td>Online learning</td>
</tr>
<tr>
<td>6</td>
<td>Leadership and transformational change</td>
<td>In residential learning sessions (3 of 4 days each) in months 2, 5 and 12 of the programme</td>
<td>15</td>
<td>Face-to-face teaching</td>
</tr>
<tr>
<td>7</td>
<td>Research Project: Final report (MSc only)</td>
<td>After month 12 of the programme (deadline during month 18)</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

PG Diploma: Modules 1-6 (60 ECTS)
MSc: Modules 1-6 + Research project (90 ECTS)

**Assessment Structure: PG Diploma**

<table>
<thead>
<tr>
<th>Programme Components</th>
<th>ECTS</th>
<th>% Award Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Module 1</td>
<td>5</td>
<td>8.3%</td>
</tr>
<tr>
<td>● Module 2</td>
<td>10</td>
<td>16.6%</td>
</tr>
<tr>
<td>● Module 3</td>
<td>10</td>
<td>16.6%</td>
</tr>
<tr>
<td>● Module 4</td>
<td>10</td>
<td>16.6%</td>
</tr>
<tr>
<td>● Module 5</td>
<td>10</td>
<td>16.6%</td>
</tr>
<tr>
<td>● Module 6</td>
<td>15</td>
<td>25%</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Assessment Structure: MSc**

<table>
<thead>
<tr>
<th>Programme Element</th>
<th>ECTS</th>
<th>% Award Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taught Element: 6 Core Modules: As for PG Diploma (see above)</td>
<td>60</td>
<td>66.6%</td>
</tr>
</tbody>
</table>
Research Project Element: 10,000 word report | 30 | 33.3%
--- | --- | ---
Total | 90 | 100%

**Marking Scheme**

**PG Diploma**

The PG Diploma is unclassified. In order to pass the award, a student must:

- Achieve a mark of at least 40% in each assessment
- Achieve an aggregate pass mark of at least 50% in each module
- Achieve an aggregate pass mark of at least 50% across the programme as a whole
  - Students may be condoned in one module with an aggregate mark of 45%

**MSc**

In order to pass the award, a student must:

- Achieve a mark of at least 40% in each assessment
- Achieve an aggregate pass mark of at least 50% in each module
- Achieve an aggregate pass mark of at least 50% across the programme as a whole
- Students may be condoned in one taught module with an aggregate mark of 45%
- Achieve a mark of 50% in the Research Project

The MSc can be awarded as a pass, merit or distinction classification.

- In order to be awarded a result of merit, a candidate must normally achieve at least 60 per cent in each element and an aggregate mark of 60 per cent of greater across the programme as a whole;
- In order to be awarded a result of distinction, a candidate must achieve at least 70 per cent in each element and an aggregate mark of 70% per cent or greater across the programme as a whole.
- Candidates should only be considered for promotion to pass, merit or distinction if their aggregate mark is within 2.5 per cent of the relevant borderline. Nevertheless, candidates whom the Examination Board deems to have exceptional circumstances may be considered for promotion even if their aggregate mark is more than 2.5 per cent from the borderline. In such cases the necessary extra marks should be credited to bring the candidate’s aggregate mark into the higher range.

General, Academic and Examination Regulations:
[www.imperial.ac.uk/about/governance/academic-governance/regulations/](http://www.imperial.ac.uk/about/governance/academic-governance/regulations/)

**Rules of Progression**

Students will register for the PG Dip in the first instance. They will be able to transfer to the MSc during the programme, or after successful completion of the PG Diploma.

Having successfully completed the PG Diploma, students can return in later years to complete the MSc, as long as the MSc is completed within 5 years of registering for the initial PG Diploma. The annual entry point for students who already hold a Postgraduate Diploma is in September.
<table>
<thead>
<tr>
<th>Modules</th>
<th>Delivery model</th>
<th>Core/ Elective</th>
<th>Year</th>
<th>L&amp;T Hours</th>
<th>Ind. Study Hours</th>
<th>Placement Hours</th>
<th>Total Hours</th>
<th>% Written Exam</th>
<th>% Coursework</th>
<th>% Practical</th>
<th>FHEQ Level</th>
<th>ECTS</th>
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</thead>
<tbody>
<tr>
<td>Module 1: Essentials of health systems</td>
<td>Online learning</td>
<td>Core</td>
<td>1</td>
<td>20</td>
<td>52.5</td>
<td>52.5</td>
<td>125</td>
<td>80%</td>
<td>0%</td>
<td>20%</td>
<td>7</td>
<td>5</td>
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<tr>
<td>Module 2: Adopting and tailoring the project and programme lifecycle</td>
<td>Blended learning</td>
<td>Core</td>
<td>1</td>
<td>60</td>
<td>47.5</td>
<td>142.5</td>
<td>250</td>
<td>0%</td>
<td>80%</td>
<td>20%</td>
<td>7</td>
<td>10</td>
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<tr>
<td>Module 3: Health information systems and technologies</td>
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<td>Core</td>
<td>1</td>
<td>40</td>
<td>105</td>
<td>105</td>
<td>250</td>
<td>40%</td>
<td>40%</td>
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<td>7</td>
<td>10</td>
</tr>
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<td>Module 4: User-centred design and citizen-driven informatics</td>
<td>Blended learning</td>
<td>Core</td>
<td>1</td>
<td>40</td>
<td>105</td>
<td>105</td>
<td>250</td>
<td>50%</td>
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<td>50%</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Module 5: Decision support, knowledge management and actionable data analytics</td>
<td>Online learning</td>
<td>Core</td>
<td>1</td>
<td>40</td>
<td>105</td>
<td>105</td>
<td>250</td>
<td>40%</td>
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<td>20%</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Module 6: Leadership and transformational change</td>
<td>Blended learning</td>
<td>Core</td>
<td>1</td>
<td>100</td>
<td>70</td>
<td>205</td>
<td>375</td>
<td>30%</td>
<td>30%</td>
<td>40%</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Research project</td>
<td>Core</td>
<td></td>
<td>2</td>
<td>25</td>
<td>225</td>
<td>500</td>
<td>750</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>7</td>
<td>30</td>
</tr>
</tbody>
</table>

PG Dip: Modules 1-6 (60 ECTS)
MSc: Modules 1-6 + Research project (90 ECTS)
Supporting Information

The Programme Handbook is available at: TBD

The Module Handbook is available at: TBD

The College’s entry requirements for postgraduate programmes can be found at: www.imperial.ac.uk/study/pg/apply/requirements

The College’s Quality & Enhancement Framework is available at: www.imperial.ac.uk/registry/proceduresandregulations/qualityassurance

The College’s Academic and Examination Regulations can be found at: www.imperial.ac.uk/about/governance/academic-governance/regulations/

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