# BSc Medical Sciences with Immunity & Infection

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 s/he takes full advantage of the learning opportunities provided. This programme specification is intended as a reference point for prospective students, current students, external examiners and academic and support staff involved in delivering the programme and enabling student development and achievement.

## Programme Information

<table>
<thead>
<tr>
<th>Programme Title</th>
<th>Medical Sciences with Immunity &amp; Infection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Award(s)</td>
<td>BSc (intercalated)</td>
</tr>
<tr>
<td>Programme Code</td>
<td>A137</td>
</tr>
<tr>
<td>Awarding Institution</td>
<td>Imperial College London</td>
</tr>
<tr>
<td>Teaching Institution</td>
<td>Imperial College London</td>
</tr>
<tr>
<td>Faculty</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>Department</td>
<td>School of Medicine</td>
</tr>
<tr>
<td>Main Location of Study</td>
<td>Hammersmith Campus</td>
</tr>
<tr>
<td>Mode and Period of Study</td>
<td>1 academic year full-time</td>
</tr>
<tr>
<td>Cohort Entry Points</td>
<td>Annually in October</td>
</tr>
<tr>
<td>Relevant QAA Benchmark Statement(s)</td>
<td>Degrees in Medicine</td>
</tr>
<tr>
<td>and/or other external reference points</td>
<td>GMC Undergraduate Standards &amp; Guidance</td>
</tr>
<tr>
<td>Total Credits</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>120</td>
</tr>
</tbody>
</table>

### Specification Details

<table>
<thead>
<tr>
<th>Student cohorts covered by specification</th>
<th>2018–19 entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person responsible for the specification</td>
<td>Dr Fiona Culley</td>
</tr>
<tr>
<td>Date of introduction of programme</td>
<td>N/A</td>
</tr>
<tr>
<td>Date of programme specification/revision</td>
<td>March 2018</td>
</tr>
</tbody>
</table>

## Programme Overview

The BSc in Immunity and Infection allows a science-based study of the immune system in health and
disease; in particular, diseases caused by infectious organisms, breakdown of peripheral tolerance and tumour formation. Building upon an understanding of the basic mechanisms underpinning microbial pathogenesis, immune activation, inflammation and tolerance. The course will cover host-pathogen interactions, immune evasion, vaccination, immune-mediated pathogenesis, autoimmunity and the immunological aspects of transplantation including approaches for the analysis of immune responses.

This course comprises an initial two-week Introductory module, followed by three five-week taught modules and either a ten-week research project or a specialist course (two five-week modules).

Learning Outcomes

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)

By the end of the course the student will:

- Have a broad understanding of how and why microorganisms cause human disease;
- Be able to discuss how the immune system recognises and responds to foreign and sometimes to self-antigens;
- Understand how disordered immunity, inflammation and regulatory mechanisms can contribute to human disease;
- Understand the immune challenges of transplantation and the relevance and importance of clinical organ transplants;
- Understand the principles of therapeutic immune modulation through vaccination and immunomodulation.

Entry Requirements

**Academic Requirement**

Registration on a General Medical Council (GMC)-recognised MBBS Degree (or equivalent). Students must have successfully completed the first two years of that programme. No break in studies is permitted between the programme at the other institution and the beginning of the programme for the BSc degree.

Applicants should normally demonstrate performance at 2:1 (upper second class) or equivalent.

**Non-academic Requirements**

Applicants from universities other than Imperial College will apply through a process which requires an academic transcript, one academic reference and a personal statement.

**English Language Requirement**

Standard requirement

IELTS score of 6.5 overall (minimum 6.0 in all elements)
The programme’s competency standards document can be found at: https://www.imperial.ac.uk/medicine/study/undergraduate/key-programme-information

### Learning & Teaching Strategy

| Scheduled Learning & Teaching Methods | • Lectures  
|                                      | • Laboratory practicals  
|                                      | • Clinical Demonstrations  
|                                      | • Small Group teaching (seminars, tutorials, team based learning) |
| E-learning & Blended Learning Methods | • Technology Enhanced Learning is used extensively throughout the programme to complement other modes of teaching |
| Project and Placement Learning Methods | • Students have the opportunity to undertake a wide variety of laboratory-based, clinical and systematic review based projects during Part C (Modules 4 and 5). |

### Assessment Strategy

| Assessment Methods | • Written Exams  
|                    | • Multiple Choice Tests  
|                    | • In-course assessments  
|                    | • Poster Presentation  
|                    | • Practical assessments  
|                    | • Research project assessments (oral and written) |

### Academic Feedback Policy

Feedback on formal formative and summative assessment is normally provided within two working weeks. Feedback on non-assessed work may involve immediate verbal feedback on learning activities, and peer and self-assessment. Rapid feedback may be facilitated through discussion during small group and one-to-one tutorials, as well as via the VLE.

### Re-sit Policy

In line with College policy, students who are unsuccessful in any of their examinations may usually be allowed an opportunity to re-sit at the discretion of the Board of Examiners.

The College’s Policy on Examination Re-sits is available at: https://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/

Specific information regarding re-sits for Intercalated BSc degrees in the Faculty of Medicine can be found in the relevant Academic Regulations available at: https://www.imperial.ac.uk/about/governance/academic-governance/regulations/

### Mitigating Circumstances Policy
Students may be eligible to apply for mitigation if they have suffered from serious and unforeseen circumstances during the course of their studies that have adversely affected their ability to complete an assessment task and/or their performance in a piece of assessment.

The College’s Policy on Mitigating Circumstances is available at: https://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/

### Programme Structure

<table>
<thead>
<tr>
<th></th>
<th>Pre-Session</th>
<th>Autumn Term</th>
<th>Spring Term</th>
<th>Summer Term</th>
<th>Summer Vacation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Modules</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Projects</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### Assessment Dates & Deadlines

**Written Examinations**
- Part B Examinations: February

**Coursework Assessments**
- Lab practicals write up: October
- Essay: November
- Poster Presentation: October
- Essay: December
- PPT Presentation: December
- Timed Essay: February
- Timed data interpretation: February

**Project Deadlines**
- **BSc Project**
  - Project Write-up: May (1 week)
  - Oral presentations of the Project: May
  - Project submission deadline: May
- **Specialist Course: Module 5 - Mini-project:**
  - April - May (5 weeks, 3 days)
  - Mini-project submission deadline: May
  - Oral presentations of the Mini-project: May (1 week)

### Assessment Structure

Marking Scheme
An aggregate mark of 40% in each assessment AND an aggregate mark of at least 40% in each module is required to graduate/pass the year.

**Final Degree Classifications**

Third – a student must achieve an aggregate mark of 40%
Lower Second – a student must achieve an aggregate mark of 50%
Upper Second – a student must achieve an aggregate mark of 60%
First – a student must achieve an aggregate mark of 70%

<table>
<thead>
<tr>
<th>Module Weightings</th>
<th>% Module Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Module</td>
<td>0%</td>
</tr>
<tr>
<td>Inflammation, Immunology, Infection and Wound-healing</td>
<td>20%</td>
</tr>
<tr>
<td>Infection and Host Responses</td>
<td>20%</td>
</tr>
<tr>
<td>Autoimmunity, Tumour Immunology, Transplantation and Tolerance</td>
<td>20%</td>
</tr>
<tr>
<td>Immunity &amp; Infection Project</td>
<td>40%</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>I&amp;I-INTRO</td>
<td>Introduction module</td>
</tr>
<tr>
<td>I&amp;I-1</td>
<td>Inflammation, Immunology, Infection and Wound-healing</td>
</tr>
<tr>
<td>I&amp;I-2</td>
<td>Infection and Host Responses</td>
</tr>
<tr>
<td>I&amp;I-3</td>
<td>Autoimmunity, Tumour Immunology, Transplantation and Tolerance</td>
</tr>
<tr>
<td>I&amp;I-C</td>
<td>Immunity &amp; Infection Project</td>
</tr>
</tbody>
</table>
### Supporting Information

<table>
<thead>
<tr>
<th><strong>The Programme Handbook is available at:</strong></th>
<th><a href="https://www.imperial.ac.uk/medicine/study/undergraduate/intercalated-bsc-programme/immunity-and-infection/">https://www.imperial.ac.uk/medicine/study/undergraduate/intercalated-bsc-programme/immunity-and-infection/</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Module Handbook is available at:</strong></td>
<td><a href="https://www.imperial.ac.uk/medicine/study/undergraduate/intercalated-bsc-programme/immunity-and-infection/">https://www.imperial.ac.uk/medicine/study/undergraduate/intercalated-bsc-programme/immunity-and-infection/</a></td>
</tr>
<tr>
<td><strong>The College’s entry requirements for undergraduate programmes can be found at:</strong></td>
<td><a href="http://www.imperial.ac.uk/ug/apply/requirements/">www.imperial.ac.uk/ug/apply/requirements/</a></td>
</tr>
<tr>
<td><strong>The College’s Quality &amp; Enhancement Framework is available at:</strong></td>
<td><a href="http://www.imperial.ac.uk/registry/proceduresandregulations/qualityassurance">www.imperial.ac.uk/registry/proceduresandregulations/qualityassurance</a></td>
</tr>
<tr>
<td><strong>The College’s Academic and Examination Regulations can be found at:</strong></td>
<td><a href="http://www.imperial.ac.uk/about/governance/academic-governance/regulations/">http://www.imperial.ac.uk/about/governance/academic-governance/regulations/</a></td>
</tr>
</tbody>
</table>

Imperial College is an independent corporation whose legal status derives from a Royal Charter granted under Letters Patent in 1907. In 2007 a Supplemental Charter and Statutes was granted by HM Queen Elizabeth II. This Supplemental Charter, which came into force on the date of the College’s Centenary, 8th July 2007, established the College as a University with the name and style of "The Imperial College of Science, Technology and Medicine". [http://www.imperial.ac.uk/admin-services/secretariat/college-governance/charter-and-statutes/](http://www.imperial.ac.uk/admin-services/secretariat/college-governance/charter-and-statutes/)

Imperial College London is regulated by the Office for Students (OfS) [https://www.officeforstudents.org.uk/](https://www.officeforstudents.org.uk/)