Programme Specification 2020-21

MASTER OF PHILOSOPHY IN CHEMICAL ENGINEERING AND BIOTECHNOLOGY

<table>
<thead>
<tr>
<th>Awarding body</th>
<th>University of Cambridge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching institution</td>
<td>Department of Chemical Engineering and Biotechnology</td>
</tr>
<tr>
<td>Accreditation details</td>
<td>None</td>
</tr>
<tr>
<td>Name of final award</td>
<td>Master of Philosophy</td>
</tr>
<tr>
<td>Programme title</td>
<td>Chemical Engineering and Biotechnology</td>
</tr>
<tr>
<td>HECoS code(s)</td>
<td>100143 (chemical engineering)</td>
</tr>
<tr>
<td></td>
<td>100134 (biotechnology)</td>
</tr>
<tr>
<td>Relevant QAA benchmark statement(s)</td>
<td>None</td>
</tr>
<tr>
<td>Qualifications framework level</td>
<td>7 (Masters)</td>
</tr>
<tr>
<td>Date specification produced</td>
<td>April 2021</td>
</tr>
</tbody>
</table>

Educational aims of the programme

The M.Phil. in Chemical Engineering and Biotechnology is offered by the Department of Chemical Engineering and Biotechnology as a full-time period of research. It provides students with specialist knowledge and an introduction to research skills. Its main aims are:

- to give students with relevant experience at first-degree level the opportunity to carry out focussed research in the discipline under close supervision; and
- to give students the opportunity to acquire or develop skills and expertise relevant to their research interests.

Learning Outcomes

By the end of the programme, students will have:

- a comprehensive understanding of techniques, and a thorough knowledge of the literature applicable to their research;
- demonstrated originality in the application of knowledge, together with a practical understanding of how research and enquiry are used to create and interpret knowledge in their field;
- shown abilities in the critical evaluation of current research and research techniques and methodologies;
- demonstrated some self-direction and originality in tackling and solving problems, and acted autonomously in the planning and implementation of research.

Programme structure

The M.Phil. course is a three-term full-time programme and involves minimal formal teaching. Students are integrated into the research culture of the Department by joining a research group. They will attend some of the Department’s programme of research seminars and other graduate courses, but most research training is provided within the group structure and overseen by their research supervisor. Informal opportunities to develop research skills also exist through mentoring by fellow students and members of staff.

Assessment
The scheme of examination for the M.Phil. in Chemical Engineering and Biotechnology consists of a thesis, of not more than 15,000 words in length (exclusive of tables, footnotes, bibliography and appendices), on a subject approved by the Degree Committee for the Faculty of Engineering. The examination includes an oral examination on the thesis and on the general field of knowledge within which it falls. The Examiners need to be satisfied that the candidate can design and carry out investigations, assess and interpret the results obtained, and place the work in the wider perspectives of the subject.

Management of teaching quality and standards

The University ensures high standards of teaching and learning in the following ways:

- The completion of Annual Quality Updates by each Faculty and Department, to enable central overview of provision and assist in dissemination of good practice
- Scrutiny of the reports of External Examiners for all teaching programmes
- Encouraging student engagement at both the local level, through involvement in Faculty and Departmental Committees, and at a central level by participation in the Postgraduate Teaching Experience Survey (PTES) and the Postgraduate Research Experience Survey (PRES)
- Holding reflective, centrally-coordinated, Learning and Teaching Reviews for all teaching institutions every six years to explore provision and suggest constructive courses of action
- Mentoring, appraisal, and peer review of staff, and encouraging staff participation in personal development programmes

Student Support

The Department conforms to the University’s Code of Practice for graduate students.

Further information on Departmental support for individual students may be obtained on request to the Department.

Graduate Employability and Career Destinations

The University Careers Service maintains links with relevant employers and takes into account employer needs and opinions in the services which it provides for students. The Careers Service also allocates a Careers Adviser to each College, faculty and department to act as a point of contact.

Every effort has been made to ensure the accuracy of the information in this programme specification. At the time of publication, the programme specification has been approved by the relevant Faculty Board (or equivalent). Programme specifications are reviewed annually, however, during the course of the academical year, any approved changes to the programme will be communicated to enrolled students through email notification or publication in the Reporter. The relevant faculty or department will endeavour to update the programme specification accordingly, and prior to the start of the next academical year.

Further information about specifications and an archive of programme specifications for all awards of the University is available online at: https://www.camdata.admin.cam.ac.uk/