

The University of Leeds

EXTERNAL EXAMINER'S REPORT

ACADEMIC YEAR: 2016-17

QAT Received 16/04/2018

Part A: General Information

Subject area and awards being examined

Faculty / School of:	School of Mechanical Engineering
Subject(s):	<i>Tissue Engineering and Regenerative Medicine – Innovation in Medical & Biological Engineering</i>
Programme(s) / Module(s):	MSc (Medical Engineering) Integrated MSc (CDT Medical & Biological Engineering)
Awards (e.g. BA/BSc/MSc etc):	MSc

Part B: Comments for the Institution on the Examination Process and Standards

Points of innovation and/or good practice

Please highlight areas of innovation or good practice within the programmes or processes you have been involved with in this box.

- Students are exposed to and benefit from a wide range of learning experiences on offer, which help students to prepare for their doctoral research projects in later years. There is a strong cohort identity with good opportunities for students to interact across cohorts and with other CDTs
- Students are encouraged to review their training needs and are required to keep and maintain a record of their professional development during the course of their studies
- Students in Year 2 to undertake a mandatory external placement, many of which involved collaboration overseas, giving those students a valuable international research experience at leading research universities and institutes abroad

Enhancements made from the previous year

Please highlight any enhancements made to the programme(s) or processes over the past year in this box.

Matters for Urgent Attention

If there are any areas which you think require urgent attention before the programme is offered again please note them in this box

None

For Examiners in the first year of appointment

1.	Were you provided with an External Examiner Handbook?	N/A
2.	Were you provided with copies of previous External Examiners' reports and the School's responses to these?	N/A
3.	Were you provided with a External Examiner Mentor?	N/A

For Examiners completing their term of appointment

4.	Have you observed improvements in the programme(s) over the period of your appointment?	N/A
5.	Has the school responded to comments and recommendations you have made?	N/A

6.	Where recommendations have not been implemented, did the school provide clear reasons for this?	N/A
7.	Have you acted as an External Examiner Mentor?	N/A

Please comment on your experience of the programme(s) over the period of your appointment, remarking in particular on changes from year to year and the progressive development and enhancement of the learning and teaching provision, on standards achieved, on marking and assessment and the procedures of the School

Standards

8.	Is the overall programme structure coherent and appropriate for the level of study?	Yes
9.	Does the programme structure allow the programme aims and intended learning outcomes to be met?	Yes
10.	Are the programme aims and intended learning outcomes commensurate with the level of award?	Yes
11.	Did the Aims and ILOs meet the expectations of the national subject benchmark (where relevant)?	Yes
12.	Is the programme(s) comparable with similar programmes at other institutions?	Yes

Please use this box to explain your overall impression of the programme structure, design, aims and intended learning outcomes.

Students receive a solid grounding in the underlying principles and practice of Tissue Engineering and Regenerative Medicine, which prepares students for their doctoral research project in later years. There is a good balance of core (compulsory) and specialist elective classes, allowing students to broaden their knowledge whilst giving them scope to specialise more in their chosen field of study.

13.	Is the influence of research on the curriculum and learning and teaching clear?	Yes
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Please explain how this is/could be achieved (examples might include: curriculum design informed by current research in the subject; practice informed by research; students undertaking research)

In addition to the taught elements and professional development and transferable skills training provided, students are afforded several opportunities to acquire practical research experience in laboratories across a number of Faculties at Leeds University and elsewhere, via external placement. On completion of their studies, graduates will have gained, at first hand, knowledge of the challenges of developing regenerative therapies and devices in what is a highly-regulated field. As such, those graduates will be well placed to pursue careers in academia, industry, the health service, or with regulatory and government bodies.

14.	Does the programme form part of an Integrated PhD?	Yes
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Please comment on the appropriateness of the programme as training for a PhD:

There is a good balance between discipline-specific and generic skills training. In addition to the five core training areas identified, the other compulsory training elements include innovation seminar series, research ethics training, covering issues of plagiarism and academic integrity, and workshops that focus on team working. Moreover, students are encouraged to tailor their training needs in discussion with their supervisors.

15.	Does the programme include clinical practice components?	No
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Please comment on the learning and assessment of practice components of the curriculum here:

16.	Is the programme accredited by a Professional or Statutory Regulatory Body (PSRB)?	Yes
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Please comment on the value of, and the programme's ability to meet, PSRB requirements here:

The MSc Medical Engineering course is accredited by the Institution of Mechanical Engineers, allowing graduates to seek registration with the Engineering Council as a Chartered Engineer after graduation.

Assessment and Feedback

17.	Does the programme design clearly align intended learning outcomes with assessment?	Yes
<p><i>Please comment on the assessment methods and the appropriateness of these to the ILOs, in particular: the design and structure of the assessment methods, and the arrangements for the marking of modules and the classification of awards; the quality of teaching, learning and assessment methods that may be indicated by student performance.</i></p> <p>Based on the information provided in the course handbook, and the selection of examination papers and scripts I was invited to scrutinise, the programme compares favourably with previous years and similar programmes elsewhere with which I am familiar. A wide variety of learning and assessment methods is employed, including group activities, oral and poster presentation, reflective logs, and written reports. These formal assessments are designed to improved students' information literacy and research skills, and test students' analytical skills and ability to evaluate critically current research in the field. Students also undertake exercises in grant proposal writing, which help them to apply their knowledge to the conception, planning and organisation of research activities and the allocation of resources.</p> <p>Detailed module guidance, marking schedules and criteria are provided for compulsory modules and associated coursework. The questions and marking schemes set for all written examinations were fair and reflected well the content and learning outcomes of each module. Students were provided with comprehensive written and verbal feedback on all work submitted for assessment. The criteria and guidelines for degree classification are robust, and were applied consistently throughout, taking into account any material issues that may have affected an individual student's academic performance.</p>		
18.	Is the design and structure of the assessment methods appropriate to the level of award?	Yes
19.	Were students given adequate opportunity to demonstrate their achievement of the programme aims and intended learning outcomes?	Yes
<p><i>Please comment on the academic standards demonstrated by the students and, where possible, their performance in relation to students on comparable courses; the strengths and weaknesses of the students as a cohort:</i></p> <p>Student performance is comparable to other HEIs with which I am familiar. Some classes are common to other MSc/MEng programmes, which gives confidence that the learning outcomes across the board have been met. Those students who do not meet the required attainment for progression, or who chose to terminate their studies for whatever reason, are given the opportunity to exit from either programme with an appropriate qualification.</p> <p><i>Please use this box to provide any additional comments you would like to make in relation to assessment and feedback:</i></p> <p>There are clear marking schedules and detailed individual feedback on is provided on individual and group work activities. Students comment favourably on the support they receive from the CDT office.</p>		

The Progression and Awards Process

20.	Were you provided with guidance relating to the External Examiner's role, powers and responsibilities in the examination process?	Yes
21.	Was the progression and award guidance provided sufficient for you to act effectively as an External Examiner?	Yes
22.	Did you receive appropriate programme documentation for your area(s) of responsibility?	Yes
23.	Did you receive appropriate module documentation for your area(s) of responsibility?	Yes
24.	Did you receive full details of marking criteria applicable to your area(s) of responsibility?	Yes
25.	Were you provided with all draft examination papers/assessments?	N/A
26.	Was the nature and level of the assessment questions appropriate?	Yes
27.	Were suitable arrangements made to consider your comments on assessment questions?	N/A

28.	Was sufficient assessed work made available to enable you to have confidence in your evaluation of the standard of student work?	Yes
29.	Were the examination scripts clearly marked/annotated?	Yes
30.	Was the choice of subjects for final year projects and/or dissertations appropriate?	Yes
31.	Was the method and standard of assessment appropriate for the final year projects and/or dissertations?	Yes
32.	Were the administrative arrangements satisfactory for the whole process, including the operation of the Progression and Awards Board?	Yes
33.	Were you able to attend the Progression and Awards Board meeting?	Yes
34.	Were you satisfied with the recommendations of the Progression and Awards Board?	Yes
35.	Were you satisfied with the way decisions from the School Special Circumstances meeting were communicated to the Progression and Awards Board?	Yes
<p><i>Please use this box to provide any additional comments you would like to make on the questions above:</i></p> <p>Draft examination papers/assessments were reviewed by the other external examiner. I was, however, given the opportunity to review a selection of examination papers and scripts prior to the Board of Examiners' meeting.</p>		

Other comments

Please use this box if you wish to make any further comments not covered elsewhere on the form

The arrangements on the day were satisfactory and I was satisfied with the conduct of the Board and the recommendations made.

Name of School and Head of School (or nominee)

Title and Name of Responder:

Position*:

Faculty / School of:

Address for communication:

Email:

Telephone:

Head of School

Mechanical Engineering

University of Leeds, Leeds, LS2 9JT, UK

*If the individual responding to the report is not the Head of School please state their position within the School.

Completing the School response

The completed School response (including the full original report) should be attached to an e-mail and sent to the Pro-Dean for Student Education in the relevant Faculty. Following approval by the Pro-Dean for Student Education, the School must send the response (including the full original report) directly to the External Examiner. A copy must also be emailed to the Quality Assurance Team at qat@leeds.ac.uk. External Examiners should receive a formal response no later than six weeks after receipt of the original report.

Response to Points of innovation and/or good practice

It is pleasing that the external examiner recognises the good range of discipline-specific and generic skills training.

Response to Enhancements made from the previous year

N/A.

Response to Matters for Urgent Attention

If any areas have been identified for urgent attention before the programme is offered again please provide a specific response to them here:

None.

Response to questions 1-7 (and related comments)

Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:

No issues raised.

Standards**Response to questions 8 to 16 (and related comments)**

Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:

It is pleasing to receive very positive comments about this.

Assessment and Feedback**Response to questions 17 to 19 (and related comments)**

Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:

It is pleasing that the examiner considers the marking schedules and individual feedback is very comprehensive.

The Progression and Awards Process

Response to questions 20-35 (and related comments)

Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:

The positive comments are very pleasing.

Other comments

Response to items included in the 'Other Comments' section of the report

None.