

The University of Leeds
EXTERNAL EXAMINER'S REPORT
ACADEMIC YEAR: 2010– 2011

PART A: GENERAL INFORMATION

Subject area and awards being examined:

School of: Mechanical Engineering	Subject(s): BEng/MEng Medical Engineering
Programme(s) / Module(s): Medical Engineering MECH 2600, 2610, 3730, 3835, 3900	awards: (e.g. BA/BSc/MSc etc.)

The completed report should be attached to an e-mail and sent as soon as possible, and no later than 6 weeks after the relevant meeting of the Board of Examiners, to exexadmin@leeds.ac.uk.

Alternatively you can post your report to:

**Head of Academic Quality and Standards,
Academic Quality and Standards Team,
Room 12:81, EC Stoner Building,
The University of Leeds, Leeds LS2 9JT**

PART B: COMMENTS FOR THE INSTITUTION ON THE EXAMINATION PROCESS AND STANDARDS

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.

Only applicable in first year of appointment

Were you provided with copies of previous relevant External Examiners' reports and the response of the School to these?

Yes.

For Examiners completing their term of appointment

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.

N/A

Standards

1. Please indicate the extent to which the programme aims and intended learning outcomes (ILOs) were commensurate with the level of the award?

- *The appropriateness of the intended learning outcomes for the programme(s)/modules and of the structure and content of the programme(s);*
- *The extent to which standards are appropriate for the award or award element under consideration.*

I found the academic standards of the Medical Engineering degree programme to be high. The aims of the programme and intended learning outcomes were appropriate for the level of the award. In modules, the School was prepared to fail students that did not achieve the intended learning outcomes.

2. Did the aims and ILOs meet the expectations of the national subject benchmark (where relevant)?

- *The comparability of the programme(s) with similar programme(s) at other institutions and against national benchmarks and the Framework for Higher Education Qualifications.*

The standards are comparable with other top Mechanical Engineering Schools in the UK, based on my experience of External Examining and being a member of the Institution of Mechanical Engineers Academic Standards Panel.

3. Please comment on the assessment methods and the appropriateness of these to the ILOs?

- *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.*

There is a good range of assessments methods, as you would expect for an engineering degree, that allows students to demonstrate knowledge and understanding. Assessment methods include examinations, laboratories, individual projects and team projects.

4. Were students given adequate opportunity to demonstrate their achievement of the aims and ILOs?

- *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.*

On visiting the School I concentrated on looking at Individual and Team Projects. These projects gave the students an excellent opportunity to display their engineering knowledge. There were clear differences between projects receiving grades from 3rd to 1st class. I met with four students (1 Medical Engineer and 3 Mechanical Engineers that had taken Medical Engineering Projects). The students were very confident and articulate.

5. For Examiners responsible for programmes that include clinical practice components, please comment on the learning and assessment of practice components of the curriculum

N/A

6. The nature and effectiveness of enhancements to the programme(s) and modules since the previous year

It would be particularly helpful if you could also identify areas of good practice which are worthy of wider dissemination.

Unable to comment as this is my first year as External Examiner.

7. The influence of research on the curriculum and learning and teaching

This may include examples of curriculum design informed by current research in the subject; practice informed by research; students undertaking research.

There is a strong influence of research on the Medical Engineering degree programme from the research undertaken in the Institute of Medical and Biological Engineering. Individual and Team projects are offered. It was good to see that a number of projects had a surgical collaborator as well.

The Examination Process

8. **The University and its Schools provide guidance for External Examiners as to their roles, powers and responsibilities. Please indicate whether this material was sufficient for you to act effectively as an External Examiner?**

- *Whether external examiners have sufficient access to the material needed to make the required judgements and whether they are encouraged to request additional information.*

I had access to all the material that I required. Marked examination papers, team project reports and individual project reports were available for my visit.

9. **Did you receive appropriate documentation relating to the programmes and/or parts of programmes for which you have responsibility, e.g. programme specifications or module handbooks?**

- *The coherence of the policies and procedures relating to external examiners and whether they match the explicit roles they are asked to perform.*

I was given all the information required.

10. **Was sufficient assessed/examination work made available to enable you to have confidence in your evaluation of the standard of student work?**

Yes. I was able to view a range of examination papers. Project work that covered the full range from fail to 1st class was available to view.

11. **Were the administrative arrangements satisfactory for the whole process, including the operation of the Board of Examiners?**

Yes. Communication with the Student Support Office in the School was excellent. Examination papers for review were sent in good time with a clear deadline.

12. **Were appropriate procedures in place to give due consideration to mitigating circumstances and medical evidence?**

Yes. The School gave due consideration to students and decisions made due to mitigating circumstances were explained at the External Examination Board. Minutes from the Internal Examination Board were also provided, which was useful to see how decisions had been made.

For Examiners involved in Mentoring Arrangements

If you have acted as a mentor to a new external examiner or have received mentor support please comment here on the arrangements.

N/A

Other Comments

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

The Medical Engineering has much smaller numbers compared to the other degree programme offered in the School of Mechanical Engineering. The Medical Engineering students felt well integrated in the School, but specialised careers advice may be appropriate for them.

There were a couple of points raised with discussions with the students. Although they felt feedback on work was good, a clearer indication on how to improve their performance would be welcome. Students would also like to know average marks for modules so that they could compare their performance to the rest of the students on the module.



UNIVERSITY OF LEEDS

07 September 2011

Dear

Re : School Response to External Examiners Report

Thank you for acting as one of the External Examiners on our Medical Engineering undergraduate programme last year and for your prompt and very positive External Examiner's report.

I would particularly like to thank you for your very supportive comments made under sections 4 and 7 of the report form regarding student projects and also the influence of research on the student education experience.

We look forward to seeing you again next year and in the meantime if there is anything either myself or our support team can do to help you in your duties, please do not hesitate to get in touch.

Best wishes

Yours sincerely