

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

PART A: GENERAL INFORMATION*Subject area and awards being examined:*

School of:	Subject(s):
Programme(s) / Module(s):	awards: (e.g. BA/BSc/MSc etc.)
MSc(Eng) Structural Engineering	MSc(Eng)

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?

n/a

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.

When the programme was introduced some four years ago it benefited from the School's substantial experience of offering other very successful Masters programmes for many years. As such, the basic framework was known to work well and all the necessary procedures for assessment and quality control were already well tried. The programme deliberately started with a relatively small cohort (about 12) to sort out any teething problems and, although there must have been some, I was not aware of any major issues that had not been resolved before my first visit. Over the years I have not identified any major concerns regarding the content of the programme or the standards achieved by the students and the comments I have made on relatively small issues appear to have been listened to and adjustments made in subsequent years. For example in the first year there were a couple of instances of plagiarism and procedures seem now to be in place such that this no longer appears to be an issue. Also, my comments about the unusually high proportion of distinctions awarded in 2010 seems to have been addressed resulting in a more normal distribution of degree classifications this year.

Having seen the programme develop and expand to about 40 students, including a healthy cohort of a dozen part time students, it does seem that the programme's sustainability is now at some risk due to a series of staffing problems that has resulted in a much reduced level of structural engineering staff being available for its delivery. Such programmes can only be maintained and developed with adequate staffing levels in place and the professionalism and hard work of the programme director and the other structural engineering staff is to be applauded especially for their efforts over the past year which has been particularly difficult for them all.

Finally, I would like to express my thanks to all the academic and support staff I have had the genuine pleasure of meeting over the past four years. My overall impression of the course is very favourable and the staff are to be praised for their undoubted commitment to its delivery and continued development. I wish the programme every success in future years.

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.*

The intended learning outcomes and the structure and content of the material taught on this programme are entirely appropriate. The standards achieved are also entirely appropriate for the award of MSc(Eng).

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 aims and ILO's meet the national subject benchmark and are in line with those adopted by other UK universities of similar standing.

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.*

Several different methods of assessment have been employed including formal examinations, assessed coursework, design exercises and an individual research project. The major dissertation and two of the taught modules were assessed entirely by coursework; all the other modules were assessed by a combination of formal examination and structured coursework in about equal proportions. The average marks for most of the modules were within the expected 60-65% range with Foundation Engineering (assessed entirely by coursework) rather lower at 56% and the two design courses rather higher at 69% and 72%. These three outlying modules had almost identical average marks in 2010 so may need some small attention to bring their assessments more in line.

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.*

The students have been given every opportunity to demonstrate their understanding of the taught material throughout the course not only in formal examinations but also in the complementary coursework associated with all the modules. The overall standards achieved by the cohort are broadly in line with those observed on similar courses as is indicated by the very acceptable distribution of degree classifications. Last year the number of distinctions had risen to about 40% but is at a more acceptable level this year (about 20%).

The one module I found disappointing was the major project. Given its importance to the final degree classification (60 credit weighting), the element of choice students exercise in choosing an appropriate subject for study, and the access they have to academic staff, and library and IT facilities over an extended period, it is to be expected that this module would attract very high average marks. This is not noticeably the case with an average mark of 63% which is acceptable but not exceptional. This mark was clearly held down by about 45% of the students achieving marks in the 50's and by the lack of any truly outstanding pieces of work as is indicated by the highest mark of 84%.

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.

The course is now in a fairly steady state after four years of operation. The one obvious change this year was the lost of the Bridge Management and Maintenance module which is an important subject area in practice currently. It also had the unfortunate effect of eliminating any student choice by removing the one and only option. This regrettable decision was really forced on the School by the lost of Structural Engineering staff as a result of

retirement, resignation and long term illness. In the circumstances the staff contributing to the programme are to be complimented for their achievements in maintaining the quality of the programme.

I had the opportunity to have a closer look at the Structural Engineering Practice module this year which is only in its second year. I was impressed with the content which included many topics I have not seen covered elsewhere such as the structure and role of the professional bodies, standards, health and safety, environmental performance, arbitration etc. These topics are not always popular with students but are important for all those embarking on professional engineering careers and the School is fortunate to have access to its own staff supplemented by practising engineers from local industry with the interest and knowledge to teach such a module.

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.

Although a large proportion of the programme comprises standard advanced material, individual lecturers are clearly enhancing their teaching by introducing knowledge acquired from their own research and through their engagement in other professional activities. Nowhere is this better demonstrated than in the major projects many of which are associated with ongoing research activities.

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.*

Entirely sufficient.

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.*

Full and appropriate documentation was provided and in good time.

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

All coursework, examination scripts and major project dissertations were available to me on the day of my visit and I had sufficient time to read through a representative sample in order to gain a good understanding of the material taught material and the methods used in its assessment.

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

I had good communication with the School throughout the year. The arrangements for my visit were excellent as was the operation of the Board of Examiners.

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

The consideration of mitigating circumstances was an agenda item at the Board of Examiners. In arriving at recommendations for the final degree classifications, each student was considered individually with sufficient care and attention to ensure the correct decisions were 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.

It is somewhat unusual for an MSc course aimed at those already in practice or those about to embark on a professional structural engineering career not to contain a stronger element of design in the form of a major design project in which all the advanced material acquired during the programme can be synthesised. This is by no means essential and I am aware that the programme was initially developed to attract those who wanted to enhance their knowledge of engineering science rather than their design competence. However, the poor performance by almost half of the student cohort on the major research project coupled with the current difficult staffing position may merit a reconsideration of this issue. Rather than a major design project for all, the introduction of individual design projects for some of the students to undertake instead of the current research project would reintroduce some welcome element of choice. It might then also be possible to engage some local practising engineers to assist with the supervision of such projects which could assist with reducing the loading on current departmental staff which seems unsustainably high at present.



22 March 2012

Dear |

External Examiner's Report: MSc(Eng) Structural Engineering

Thank you for your final external examiner's report. On behalf of the Structures team here at Leeds I would like to thank you for your input to the programme since its inception. Your advice and comments have always been very helpful and supportive and have contributed to the continuous improvement and success of the programme.

As you correctly point out in your report, it is vital for the programme's sustainability that adequate staffing levels are in place to maintain and further develop the programme. The School is taking action to resolve the structural staffing issue by advertising two lectureships in structural engineering and a teaching fellowship/senior teaching fellowship in structural engineering design. With these appointments the structural engineering teaching, particularly teaching of design, will be significantly enhanced. We think the slight deviation from the normal range of the average marks in the two design related modules and the dissertations were attributed to the staffing issues, ie, the involvement of temporary external teaching staff, and disruption to students' project work due to staff illness.

The Foundation Engineering module is assessed by coursework (one third) and examination (two thirds). The MSc students take the same exam as the MEng students and the MSc students' performance has not been as good as that of MEng students. This may reflect their more varied background and possibly a lack of depth in Geotechnics when they arrive. The module leader has agreed to prepare some extra learning support materials for the next session. In order to recruit future students with more homogeneous academic background, from 2013 we would expect successful applicants to achieve a minimum 2:1 performance in structural engineering related modules on their first degree programme even though we accept an overall entry qualification at 2:2 level.

Finally, I would like to express our thanks again for your kind support to the programme over the past four years, and wish you every success in the future.

With best wishes.

Yours sincerely