# The University of Leeds

# **EXTERNAL EXAMINER'S REPORT**

**ACADEMIC YEAR: 2016-17** 

### **Part A: General Information**

### Subject area and awards being examined

Faculty / School of: Electronic & Electrical Engineering

Subject(s):

Programme(s) / Module(s): MSc Electrical Engineering & Renewable Energy Systems

MSc Electronic & Electrical Engineering

MSc Mechatronics & Robotics

MSc Embedded System 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.

The programmes provide a high quality formation within the different specialities. Assessment strategies are well organised and generally well-executed. I appreciated the detailed worked solutions provided by the examiners for the papers that I reviewed.

#### Enhancements made from the previous year

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

N/A – this is my first year as External Examiner

### **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?	Υ
2.	Were you provided with copies of previous External Examiners' reports and the School's responses to these?	N
3.	Were you provided with a External Examiner Mentor?	Υ

#### For Examiners completing their term of appointment

4.	Have you observed improvements in the programme(s) over the period of your appointment?	Y/N
5.	Has the school responded to comments and recommendations you have made?	Y/N
6.	Where recommendations have not been implemented, did the school provide clear reasons for this?	Y/N

7.	Have you acted as an External Examiner Mentor?	Y/N
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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?	Y
9.	Does the programme structure allow the programme aims and intended learning outcomes to be met?	Y
10.	Are the programme aims and intended learning outcomes commensurate with the level of award?	Υ
11.	Did the Aims and ILOs meet the expectations of the national subject benchmark (where relevant)?	Υ
12.	Is the programme(s) comparable with similar programmes at other institutions?	Υ
	e use this box to explain your overall impression of the programme structure, design, aims and intendent ong outcomes.	ed
a wide	Sc programmes cover a range of domains. The structure of the programmes also varies with some programmes of cover a range of domains. The structure of the programmes also varies with some programmes of option module choices, while others have a more significant core module requirement. In go options are provided a broad and deep exposure to the fundamental and more applied aspects of their first and a strong point is the high level of interdisciplinary content.	eneral,
13.	Is the influence of research on the curriculum and learning and teaching clear?	Υ
	e explain how this is/could be achieved (examples might include: curriculum design informed by current subject; practice informed by research; students undertaking research)	research
in gen carried consid interna	my awareness of high quality research being conducted in EE at Leeds in specific areas, I am satisfied eral terms that the curricula for the programmes are both influenced and enhanced by the research bed out by the staff. As a suggestion to strengthen further the influence of research, I would recommend leration be given to asking students (as part of their project assessment) to identify a peer-reviewed ational conference relevant to their research and then to prepare a draft paper, e.g. in IEEE format. Fo projects, this could lead to an actual publication.	eing that
14.	Does the programme form part of an Integrated PhD?	N
Please	e comment on the appropriateness of the programme as training for a PhD:	
15.	Does the programme include clinical practice components?	N
Please	e comment on the learning and assessment of practice components of the curriculum here:	1
16.	Is the programme accredited by a Professional or Statutory Regulatory Body (PSRB)?	Υ
Please	e comment on the value of, and the programme's ability to meet, PSRB requirements here:	<u> </u>

My understanding is that some programmes have already been accredited by the relevant national accrediting body (the IET) and the others are about to seek accreditation. Such accreditation is always of value, especially to international students who comprise the majority of the student cohort on these programmes. I expect the programmes seeking accreditation to be successful in this regard.

# **Assessment and Feedback**

17. Does the programme design clearly align intended learning outcomes with assessment?

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.

My impression is that the modules are carefully and comprehensively assessed using a variety of methodologies, including formal examinations, laboratory exercises, tutorial sessions, case studies, technical reports, presentations, in-class tests, assignments etc. I had an opportunity to review the second semester examination papers earlier in the year and I found them in general well-designed to assess students' attainment of intended learning outcomes and appropriate to a Master's level qualification at a reputable institution such as the University of Leeds. In advance of the Board Meeting, I had an opportunity to review Final Reports for a selection of projects. There is some evidence of a disparity in the level of achievement expected between projects across different subject domains. I recommend that the language used in the detailed assessment form be reviewed to ensure that it captures expectations as fully as possible. In addition, rotation of second project examiners between subject areas should be encouraged where practicable. I found that the comments offered by the examiners at the end of the project assessment form are very helpful in understanding the grades awarded, although not all forms contain such comments. I recommend that the Project Module Coordinator ensures that all examiners provide at least some comments to justify the mark awarded.

18.	Is the design and structure of the assessment methods appropriate to the level of award?	Υ
19.	Were students given adequate opportunity to demonstrate their achievement of the programme aims and intended learning outcomes?	Υ

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:

The pass mark is set at a challenging 50% for modules at Masters level. The academic standards are high. Please see my further comments under section 17 above.

Please use this box to provide any additional comments you would like to make in relation to assessment and feedback:

In reviewing examination papers earlier in the year, I was not clear what additional material would be provided to students when they were sitting the papers. I recommend that any such material be provided to the External Examiner in addition to the papers and solutions.

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

28.	Was sufficient assessed work made available to enable you to have confidence in your evaluation of the standard of student work?	Υ
29.	Were the examination scripts clearly marked/annotated?	Υ
30.	Was the choice of subjects for final year projects and/or dissertations appropriate?	Υ
31.	Was the method and standard of assessment appropriate for the final year projects and/or dissertations?	Υ
32.	Were the administrative arrangements satisfactory for the whole process, including the operation of the Progression and Awards Board?	Y
33.	Were you able to attend the Progression and Awards Board meeting?	Υ
34.	Were you satisfied with the recommendations of the Progression and Awards Board?	Υ
35.	Were you satisfied with the way decisions from the School Special Circumstances meeting were communicated to the Progression and Awards Board?	Υ

Please use this box to provide any additional comments you would like to make on the questions above:

Due to adverse weather conditions I had to take a later flight than planned which curtailed my time for sampling and reviewing the examination scripts provided. I concentrated mainly on the project reports. From my very limited perusal, the examination papers appear to be properly marked and annotated.

# Other comments

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

# Part C: School Response to External Examiner Report

# Name of School and Head of School (or nominee)

Title and Name of Responder:	
Position*:	Director of Student Education
Faculty / School of:	Faculty of Engineering / School of Electronic and Electrical Engineering
Address for communication:	School of Electronic and Electrical Engineering, The University of Leeds Woodhouse Lane, Leeds, LS2 9JT
Email:	
Telephone:	

#### **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 <a href="mailto:qat@leeds.ac.uk">qat@leeds.ac.uk</a>. 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

We are pleased that our taught programmes and assessment processes are considered to be of a high standard.

#### 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:

No points for urgent attention were raised.

### 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:

We note that appropriate information was provided, except previous External Examiners' reports. We will ensure that this is done in future.

# **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:

The suggestion to require students to prepare a paper in IEEE journal format as part of the project assessment is worthy of consideration, and we are aware that this is done in some other Schools within the University. We will give this serious thought as we are currently reviewing the assessment scheme for MSc projects in line with other factors, such as consistency of marking reports. We agree that the current marking rubric needs to be improved with clearer attainment descriptors. All staff involved with grading projects are asked to provide feedback comments to the student which should include a justification for the marks awarded.

<sup>\*</sup>If the individual responding to the report is not the Head of School please state their position within the School.

#### **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:

The pass threshold for master's level modules is set at 50% across the University (this is prescribed within the Ordinances of the University). However, it is incumbent on Schools to ensure that the actual marking schemes used do not set the attainment bar unreasonably high (or low!). We believe that we have the balance right in almost all assessments, but we agree that the subjective nature of project marking demands that additional scrutiny and moderation are applied, in order to ensure that the grading is reasonable, fair and consistent.

Where additional information is provided to students for written examinations (formulae sheets, etc) these are normally included as part of the question paper, but we will check that all such information is provided when sending the papers for comments by the External Examiners.

# **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:

We note the External Examiner's confirmation that the procedures in place for examination papers, students' scripts and project reports, are all satisfactory.

### Other comments

Response to items included in the 'Other Comments' section of the report		
1	N/A	
1	N/A	