

The University of Leeds

EXTERNAL EXAMINER'S REPORT

ACADEMIC YEAR: 2018-19

QAT Received 19/11/2019

Part A: General Information

Subject area and awards being examined

Title and Name of Examiner:

<i>Faculty / School of:</i>	School of Mechanical Engineering
<i>Subject(s):</i>	
<i>Programme(s) / Module(s):</i>	BEng(Hons)/MEng Aeronautical & Aerospace engineering MSc in Aerospace Engineering
<i>Awards (e.g. BA/BSc/MSc etc):</i>	

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.

There are some really nice examples of project formulations (e.g. K7 Bluebird), and it is very nice to see the term 'optimisation' used correctly (an automatic, iterative design evolution, rather than a manual re-drawing).

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 of appointment

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

My conversation with the students highlighted concerns over the 'Aerodynamics and Aerospace Propulsion' exam. The students claimed that some of the questions had not been covered in the teaching or teaching materials, were 'out of character' compared to past papers, and that indications of likely question topics were false. Having spoken to the module leader I am assured that the matter will be addressed, but should there are obviously lessons to be learned which should be implemented next AY.

For Examiners in the first year of appointment only

1.	Were you provided with an External Examiner Handbook?	N
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?	N

For Examiners completing their term of appointment only

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
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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

N/A

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?	Y
11.	Did the Aims and ILOs meet the expectations of the national subject benchmark (where relevant)?	Y
12.	Is the programme(s) comparable with similar programmes at other institutions?	Y

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

I'm still getting to understand the content and structure of the programme, but the content seems good and comparable with equivalent qualifications at other HIEs. The taxonomy of the Learning Outcomes should be reviewed, as they sometimes do not reflect the appropriate level as suggested by Bloom, e.g. MECH5700M 'Aerospace Structures' where the description of the Los in the Module Descriptor (containing 'understand', 'analyse', 'determine') do not reflect a Masters-level module.

13.	Is the influence of research on the curriculum and learning and teaching clear?	Y
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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)

I have said "yes", but the relatively small number of aerospace specialists in the department means that the number and variety of project topics in the curriculum is understandably limited. This lack of access to aerospace-themed projects for Aerospace students was raised by the students as an issue of regret. This is especially true if one believes in the view that a student's grades will get them an interview, but it is their project that gets them the job.

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

15.	Does the programme include clinical practice components?	N
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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)?	Y
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Please comment on the value of, and the programme's ability to meet, PSRB requirements here:

The BEng(Hons) and MEng are accredited by the Royal Aeronautical Society, which is almost a requisite now for undergraduate courses in the UK and a student's path towards professional registration through the Engineering Council.

Assessment and Feedback

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

With caveat associated with my comments on the 'Aerodynamics and Aerospace Propulsion' module above.

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

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 have a mild concern that the assessments generally do not allow able students to demonstrate their ability. Many of the assessment questions are rather mechanistic which allow a student with a good memory to do well. I am very keen to see part of some or all questions that are more descriptive, or require a leap of intuition based on existing knowledge, to assess a student's thinking, rather than their ability to turn the handle.

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

None

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?	Y
29.	Were the examination scripts clearly marked/annotated?	Y
30.	Was the choice of subjects for final year projects and/or dissertations appropriate?	Y
31.	Was the method and standard of assessment appropriate for the final year projects and/or dissertations?	Y
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?	Y
34.	Were you satisfied with the recommendations of the Progression and Awards Board?	Y
35.	Were you satisfied with the way decisions from the School Special Circumstances meeting were communicated to the Progression and Awards Board?	Y

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

The arrangements for the Progression and Awards Board, including the accommodation and the pre-event evening dinner, were exemplary thank you very much, as too was the support from _____ and the programme team.

My only plea is for assessment model answers to be typed if possible. There were instances, in the few that I reviewed in my short stint so far, that made the process of checking the answers **considerably** more difficult because the handwriting was barely legible in parts.

Other comments

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

Name of School and Head of School (or nominee)

Title and Name of Examiner:

Subject(s):

Programme(s) / Module(s):

BEng(Hons)/MEng Aeronautical & Aerospace engineering
MSc in Aerospace Engineering

Awards (e.g. BA/BSc/MSc etc):

Title and Name of Responder:

Position*:

Head of School

Faculty / School of:

Mechanical Engineering

Address for communication:

University of Leeds, Leeds, LS2 9JT

Email:

Telephone:

*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) must be sent directly to the External Examiner. A copy must also be emailed to the Quality Assurance Team at gat@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

We are grateful for the positive comments about interesting projects and role of optimisation in the curriculum.

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:

We are taking the issues identified with the Aerodynamics and Aerospace Propulsion module very seriously and will ensure that these communication issues are avoided in the future.

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:

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:

We are very grateful to the examiner's comments about the appropriateness of the descriptors and will amend these to properly reflect the fact that the programme does present the appropriate level of challenge for the student. We have made a number of changes recently to increase the range of aerospace-related projects we can offer. For example, a key team member, _____, has had some of _____ duties re-allocated to enable _____ to offer more

aerospace projects, and we have recently recruited an additional lecturer in Aerial Robotics who can offer relevant projects for our Aerospace students. In addition, we are actively encouraging a number of staff to offer aerospace-related project themes, for example in CFD and aerospace design optimisation.

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:

As noted above we regret the issues raised regarding the Aerodynamics and Aerospace propulsion module and will ensure there is clearer communication to avoid any potential issues in the future.

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 are pleased with the External's positive comments regarding our Progression and Rewards Board. I am reluctant to make a blanket request for hand-written solutions to exam papers but I will re-iterate the need to ensure that solutions are indeed legible and that if Examiners feel these are not legible then staff will be requested to revise their solutions to ensure they are.

Other comments

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