

External Examiner Report (2021-22 Academic Year)

Name of External Examiner	Tiziano De Angelis
Name of Programme	Mathematics and Finance

Programme and Module Information (supplied directly or via a link to an online portal):

Did you receive programme handbooks/specifications (including programme learning outcomes)?	Most/Usually
Did you receive syllabus or module descriptors including learning outcomes at module level?	Yes/All
Did you receive details of the assessments?	Yes/All
Did you receive sufficient information about the programmes/modules in order to fulfil your role?	Yes/All

Departmental Response:

Programme and Curriculum Design:

Is the content of the degree programme balanced in relation to stated learning outcomes, e.g. the compulsory modules contain the material you would expect?	Yes/Always

Is the programme coherent and up-to-date with the expectations of the subject field?	Yes/Always

Do you consider that the programme design is suitable in relation to the following, where applicable? *relevant subject benchmarks, *Professional Statutory Regulatory Body (PSRB) *Accrediting Body requirements	Yes/Always

Assessment Strategy:

In your opinion, overall, are the methods of assessment (including unseen written papers, essay/dissertations, orals, clinical examinations) suitable in relation to the level of study and the intended learning outcomes?	Yes/Always

Is the assessment load comparable and balanced across modules of the same level?	Yes/Always

Was the overall assessment load for the programme suitable?	Yes/Always

Departmental Response:

Drafting of Assessments:

Did you receive all of the necessary draft assessments for comment/approval?	Yes/All
Were the nature and level of the tasks appropriate?	Most/Usually
Were suitable arrangements in place to consider your comments on the draft assessments?	Yes/All
Did you receive feedback on your comments?	Most/Usually

Marking and Moderation (of examination scripts, assessed coursework, dissertation/project reports, etc.)

Did you receive a sufficient number of scripts and other assessed work across the full grade profile?	Most/Usually
Was the general standard and consistency of marking appropriate?	Yes/All
Was there evidence that assessed work had been moderated internally, either through check marking or second marking?	Yes/All

Was the justification of marks clear on the scripts that you reviewed?	N/A

Practical Examinations:

Were satisfactory arrangements made for the conduct of practical examinations?	N/A
Was the general standard and consistency of marking appropriate?	N/A

Oral Examinations:

Were satisfactory arrangements made for the conduct of oral assessments (e.g. presentations, poster presentations, etc...)?	N/A
Was the assessment of such work appropriate and consistent?	N/A

Were the marking schemes/criteria and, where appropriate, model answers, suitable and applied consistently?	Yes/Always

Were the procedures for marking and moderation suitable and applied consistently in line with College policies and regulations?	Yes/Always

Were the grade boundaries for the assessments set at the appropriate level and applied consistency (i.e. the standard required to achieve the threshold mark at each grade boundary)?	Yes/Always

Programme Content Which Has Been Delivered and Assessed by Another Institution:

	Collaborative Modules (modules undertaken at local partner institutions)	Placement Activity (e.g. some or all of an undergraduate study abroad plan)
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Was it clear in advance of the Board that students under consideration had undertaken content away from the College?	N/A	N/A
Were the procedures for incorporating marks obtained by students at another institution clear and consistently applied?	N/A	N/A
Was any such provision discussed at the Board of Examiners, particularly in relation to progression/award decisions, overall value and consistency with regards to the programme(s) of study?	N/A	N/A

Where applicable, please comment on the relevance and integration of placements (provision at a Placement Provider, for example, undergraduate Year Abroad or Year in Industry; placement activity contributing to delivery of a postgraduate project) to the overall programme and their contribution to the programme learning outcomes:

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Where applicable, please comment on the relevance and integration of any collaborative modules (modules undertaken at other approved UK HEIs) to the overall programme and their contribution to the programme learning outcomes:

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Departmental Response:

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Board of Examiners Meeting:

Were you invited to attend the meeting?	Yes/All
Were you able to attend the meeting, either in person or via video-conferencing?	Yes/All
Was the meeting conducted appropriately, in your opinion?	Yes/All
Were you satisfied with the decisions of the Board of Examiners?	Yes/All
Were the arrangements for degree classification appropriate and applied consistently?	Yes/Always

Was consideration of borderline performances conducted fairly and equitably, and in line with College procedures?	Yes/Always
If viva voce of potential borderline candidates were used,	
Were suitable arrangements made for you to conduct viva voce examinations?	N/A
Was the purpose of conducting a viva voce examination and the criteria for selecting candidates for a viva voce clear?	N/A

Were the College procedures governing mitigating circumstances and/or academic misconduct (e.g. plagiarism cases) considered and applied fairly and equitably to all students?	Yes/Always

Departmental Response:

Response to Your Last External Examiner Report:

Did you receive the formal written response to your previous External Examiner report (if applicable)	Yes/All
Are you satisfied that the issues raised in the previous report have been or are being addressed?	Yes/All

Departmental Response:

Overview, Recommendations and Good Practice:

Please outline any examples of good or innovative practice in learning, teaching and assessment you would like to highlight with regards to these programme(s):
I am particularly impressed by the breadth and depth of the taught material, spanning stochastic analysis, classical financial models and the most advanced machine learning and deep learning techniques
Please outline any recommendations or suggestions for enhancement you would like to make with regards to these programme(s):

I think this programme is top of the league. The only minor point that was noticed during the board is that in a couple of modules (mostly elective ones) students tend to perform extremely well at the exam. It may be worth pitching the exam papers to a slightly higher level of difficulty.

Departmental Response:

Final Exit Report:

Please provide an overview of your term of office, including:

- *any changes in standards of student performance over time
- *major developments in the provision during your tenure
- *the implementation of any recommendations for enhancement
- * any other matters you consider appropriate

Departmental Response:

Overall Confidence Statements

In my opinion, Imperial College London is maintaining the threshold academic standards set for its awards in accordance with the FHEQ and relevant Subject Benchmarks Statements.	Yes
In my opinion the assessment process measures student achievement rigorously and fairly against the intended learning outcomes of the programme and is conducted in line with the College's policies and regulations.	Yes
In my experience the academic standards and the achievements of students are comparable with those in other degree awarding bodies.	Yes

Name and Position of Departmental Respondent:	
Date:	

External Examiner Report (2021-22 Academic Year)

Name of External Examiner	Jason Lotay
Name of Programme	Mathematics

Appointment Process:

Did you find the appointment process fit for purpose?	Yes/All
Was the appointment made in a timely manner?	Yes/All
If you attended the online induction briefing, do you consider that the arrangements were sufficient?	Yes/All
It would have been good to have been given a detailed timeframe and workload when I joined: when I would receive exams, when comments would be due, how many I would receive, when important meetings would be etc.	

Programme and Module Information (supplied directly or via a link to an online portal):

Did you receive programme handbooks/specifications (including programme learning outcomes)?	Yes/All
Did you receive syllabus or module descriptors including learning outcomes at module level?	No/None
Did you receive details of the assessments?	Most/Usually
Did you receive sufficient information about the programmes/modules in order to fulfil your role?	No/None
I only realized when I was given the Teams link close to the final meeting time that there were two exams that I never received to provide comments. I was not given the details of the specific modules I was supposed to be the external examiner for when I needed them to check the exams.	

Departmental Response:

Programme and Curriculum Design:

Is the content of the degree programme balanced in relation to stated learning outcomes, e.g. the compulsory modules contain the material you would expect?	Most/Usually
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Sometimes the material did not seem to be really challenging the students intellectually, instead requiring them to simply absorb and regurgitate the learned material, but overall the modules seems good.

Is the programme coherent and up-to-date with the expectations of the subject field?	Yes/Always

Do you consider that the programme design is suitable in relation to the following, where applicable? *relevant subject benchmarks, *Professional Statutory Regulatory Body (PSRB) *Accrediting Body requirements	Yes/Always

Assessment Strategy:

In your opinion, overall, are the methods of assessment (including unseen written papers, essay/dissertations, orals, clinical examinations) suitable in relation to the level of study and the intended learning outcomes?	Most/Usually
As I have said previously, it was sometimes the case that the unseen written papers were not used effectively to measure the intended learning outcomes.	

Is the assessment load comparable and balanced across modules of the same level?	Most/Usually
There are always discrepancies, but overall the balanced seemed quite good.	

Was the overall assessment load for the programme suitable?	Yes/Always

Departmental Response:

Drafting of Assessments:

Did you receive all of the necessary draft assessments for comment/approval?	No/None
Were the nature and level of the tasks appropriate?	Most/Usually

Were suitable arrangements in place to consider your comments on the draft assessments?	No/None
Did you receive feedback on your comments?	No/None
This was a problem. Communication from the coordinating examiner was poor. I did not receive any comments from the exam setters, I did not receive all of the exams to give comments on, and I was not made aware of which assessments I should be commenting on and when. There were also quite a large number of minor errors in the exams, which suggested that the internal checking process on a number of occasions was not undertaken properly. In one case, an exam that was a copy of a previously available exam (from the year before) made it through the internal checking process, which led to problems during the exam period (which was dealt with well).	

Marking and Moderation (of examination scripts, assessed coursework, dissertation/project reports, etc.)

Did you receive a sufficient number of scripts and other assessed work across the full grade profile?	Yes/All
Was the general standard and consistency of marking appropriate?	Most/Usually
Was there evidence that assessed work had been moderated internally, either through check marking or second marking?	Most/Usually
Was the justification of marks clear on the scripts that you reviewed?	Most/Usually
This seemed quite good. However, I am a bit concerned about the marks on projects (particularly how typically high they seemed to be), given that they were often used to decide on borderline candidates, and there were some significance differences in the marking between two examiners.	

Practical Examinations:

Were satisfactory arrangements made for the conduct of practical examinations?	N/A
Was the general standard and consistency of marking appropriate?	N/A

Oral Examinations:

Were satisfactory arrangements made for the conduct of oral assessments (e.g. presentations, poster presentations, etc...)?	N/A
Was the assessment of such work appropriate and consistent?	N/A

Were the marking schemes/criteria and, where appropriate, model answers, suitable and applied consistently?	Most/Usually
Some of the marking schemes, when I was presented with them, were very sketchy which meant that one could not directly use them for marking. It also meant it was difficult to assess the length and difficulty of questions when a skeleton mark scheme was given.	

Were the procedures for marking and moderation suitable and applied consistently in line with College policies and regulations?	Yes/Always
This seemed to be done thoroughly.	

Were the grade boundaries for the assessments set at the appropriate level and applied consistency (i.e. the standard required to achieve the threshold mark at each grade boundary)?	Most/Usually
The borderline cases were dealt with using an algorithm which seemed to work well (though I will reiterate my caveat concerning project marking). One issue that seemed to arise was the generosity surrounding mitigating circumstances in relation to marks, so this is something to consider for future years.	

Programme Content Which Has Been Delivered and Assessed by Another Institution:

	Collaborative Modules (modules undertaken at local partner institutions)	Placement Activity (e.g. some or all of an undergraduate study abroad plan)
Was it clear in advance of the Board that students under consideration had undertaken content away from the College?	N/A	N/A
Were the procedures for incorporating marks obtained by students at another institution clear and consistently applied?	N/A	N/A
Was any such provision discussed at the Board of Examiners, particularly in relation to progression/award decisions, overall value and consistency with regards to the programme(s) of study?	N/A	N/A

Where applicable, please comment on the relevance and integration of placements (provision at a Placement Provider, for example, undergraduate Year Abroad or Year in Industry; placement activity contributing to delivery of a postgraduate project) to the overall programme and their contribution to the programme learning outcomes:

Where applicable, please comment on the relevance and integration of any collaborative modules (modules undertaken at other approved UK HEIs) to the overall programme and their contribution to the programme learning outcomes:

Departmental Response:

Board of Examiners Meeting:

Were you invited to attend the meeting?	Yes/All
Were you able to attend the meeting, either in person or via video-conferencing?	Yes/All
Was the meeting conducted appropriately, in your opinion?	Yes/All
Were you satisfied with the decisions of the Board of Examiners?	Yes/All
Were the arrangements for degree classification appropriate and applied consistently?	Yes/Always

Was consideration of borderline performances conducted fairly and equitably, and in line with College procedures?	Most/Usually
If viva voce of potential borderline candidates were used,	
Were suitable arrangements made for you to conduct viva voce examinations?	N/A
Was the purpose of conducting a viva voce examination and the criteria for selecting candidates for a viva voce clear?	N/A
I think the algorithm for borderlines worked well (though one should be mindful of possible mark inflation or marking issues surrounding projects).	

Were the College procedures governing mitigating circumstances and/or academic misconduct (e.g. plagiarism cases) considered and applied fairly and equitably to all students?	Most/Usually
I think dealing with mitigating circumstances could still do with some improvement because these cases took a long time and involved a lot of discussion, which could be streamlined. There was a sense that there was a tendency to be a bit too generous.	

Departmental Response:

Response to Your Last External Examiner Report:

Did you receive the formal written response to your previous External Examiner report (if applicable)	
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Are you satisfied that the issues raised in the previous report have been or are being addressed?	
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Departmental Response:

Overview, Recommendations and Good Practice:

Please outline any examples of good or innovative practice in learning, teaching and assessment you would like to highlight with regards to these programme(s):

Nothing in particular comes to mind, but the programme seems to be fine.

Please outline any recommendations or suggestions for enhancement you would like to make with regards to these programme(s):
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I have no particular recommendations regarding the programme.
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Departmental Response:

Final Exit Report:

Please provide an overview of your term of office, including:

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| <ul style="list-style-type: none">*any changes in standards of student performance over time*major developments in the provision during your tenure*the implementation of any recommendations for enhancement* any other matters you consider appropriate |
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Departmental Response:

Overall Confidence Statements

In my opinion, Imperial College London is maintaining the threshold academic standards set for its awards in accordance with the FHEQ and relevant Subject Benchmarks Statements.	Yes
In my opinion the assessment process measures student achievement rigorously and fairly against the intended learning outcomes of the programme and is conducted in line with the College's policies and regulations.	Yes
In my experience the academic standards and the achievements of students are comparable with those in other degree awarding bodies.	Yes
As a final point, I am not sure why I was assigned the Algebra and Number Theory modules, given that my specialism and interests are in Analysis and Geometry. In particular, this meant that I was not able to make any meaningful comments on the projects, since I am not very familiar with the topics I was assigned. Perhaps this was an error, given that I was under the impression I would at least be assigned the Geometry modules?	

Name and Position of Departmental Respondent:	
Date:	

External Examiner Report (2021-22 Academic Year)

Name of External Examiner	Matthias Troffaes
Name of Programme	Mathematics (Probability & Statistics)

Appointment Process:

Did you find the appointment process fit for purpose?	
Was the appointment made in a timely manner?	
If you attended the online induction briefing, do you consider that the arrangements were sufficient?	

Programme and Module Information (supplied directly or via a link to an online portal):

Did you receive programme handbooks/specifications (including programme learning outcomes)?	Yes/All
Did you receive syllabus or module descriptors including learning outcomes at module level?	Yes/All
Did you receive details of the assessments?	Yes/All
Did you receive sufficient information about the programmes/modules in order to fulfil your role?	Yes/All
Excellent documentation was provided. I commend the admin team for preparing and organizing all the files, making the external's work as painless as can be.	

Departmental Response:

Programme and Curriculum Design:

Is the content of the degree programme balanced in relation to stated learning outcomes, e.g. the compulsory modules contain the material you would expect?	Yes/Always

Is the programme coherent and up-to-date with the expectations of the subject field?	Yes/Always

Do you consider that the programme design is suitable in relation to the following, where applicable? *relevant subject benchmarks, *Professional Statutory Regulatory Body (PSRB) *Accrediting Body requirements	Yes/Always

Assessment Strategy:

In your opinion, overall, are the methods of assessment (including unseen written papers, essay/dissertations, orals, clinical examinations) suitable in relation to the level of study and the intended learning outcomes?	Yes/Always
The exam process works very well from what I saw, and I have no concerns.	

Is the assessment load comparable and balanced across modules of the same level?	Most/Usually
The exam length for a few modules seems occasionally on the long side. This was reflected in some of the student's comments.	

Was the overall assessment load for the programme suitable?	Yes/Always

Departmental Response:

Drafting of Assessments:

Did you receive all of the necessary draft assessments for comment/approval?	Yes/All
Were the nature and level of the tasks appropriate?	Yes/All
Were suitable arrangements in place to consider your comments on the draft assessments?	Yes/All
Did you receive feedback on your comments?	Yes/All

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Marking and Moderation (of examination scripts, assessed coursework, dissertation/project reports, etc.)

Did you receive a sufficient number of scripts and other assessed work across the full grade profile?	Yes/All
Was the general standard and consistency of marking appropriate?	Yes/All
Was there evidence that assessed work had been moderated internally, either through check marking or second marking?	Yes/All
Was the justification of marks clear on the scripts that you reviewed?	Yes/All
All was mostly excellent. I felt Turnitin to be somewhat inconvenient for looking through scripts, as we cannot see the entire paper at once, and one sometimes has difficulty identifying the student code since the scripts are not ordered in this manner on Turnitin. Very often, scaling comments reference to specific scripts, which reflects excellent practice. Sometimes, for some modules, comments were lacking or missing written justification in the documentation that I had. Any such issues were promptly clarified.	

Practical Examinations:

Were satisfactory arrangements made for the conduct of practical examinations?	N/A
Was the general standard and consistency of marking appropriate?	N/A

Oral Examinations:

Were satisfactory arrangements made for the conduct of oral assessments (e.g. presentations, poster presentations, etc...)?	Yes/All
Was the assessment of such work appropriate and consistent?	Yes/All

Were the marking schemes/criteria and, where appropriate, model answers, suitable and applied consistently?	Yes/Always

Were the procedures for marking and moderation suitable and applied consistently in line with College policies and regulations?	Yes/Always
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I was glad to see that the project mark is arrived through some moderation process rather than just averaging. Comments on moderation could refer to projects in a similar range. It would have been helpful to have a summary of moderation comments also included in the excel sheet, however comments were very quickly provided on request.

Were the grade boundaries for the assessments set at the appropriate level and applied consistency (i.e. the standard required to achieve the threshold mark at each grade boundary)?	Yes/Always
Concerning scaling, the system by default sets scaling up by 5 marks. However, a default of no scaling would seem more logical to me. Additionally, moderately scaling down seems totally fine to me. I would be in favour of permitting a symmetrical range, defaulting to zero. The average project mark in year 4, for the projects that I looked at, has been exceptionally high, but the quality has simply been exceptional.	

Programme Content Which Has Been Delivered and Assessed by Another Institution:

	Collaborative Modules (modules undertaken at local partner institutions)	Placement Activity (e.g. some or all of an undergraduate study abroad plan)
Was it clear in advance of the Board that students under consideration had undertaken content away from the College?	N/A	N/A
Were the procedures for incorporating marks obtained by students at another institution clear and consistently applied?	N/A	N/A
Was any such provision discussed at the Board of Examiners, particularly in relation to progression/award decisions, overall value and consistency with regards to the programme(s) of study?	N/A	N/A

Where applicable, please comment on the relevance and integration of placements (provision at a Placement Provider, for example, undergraduate Year Abroad or Year in Industry; placement activity contributing to delivery of a postgraduate project) to the overall programme and their contribution to the programme learning outcomes:

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Where applicable, please comment on the relevance and integration of any collaborative modules (modules undertaken at other approved UK HEIs) to the overall programme and their contribution to the programme learning outcomes:

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Departmental Response:

Board of Examiners Meeting:

Were you invited to attend the meeting?	Yes/All
Were you able to attend the meeting, either in person or via video-conferencing?	Yes/All
Was the meeting conducted appropriately, in your opinion?	Yes/All
Were you satisfied with the decisions of the Board of Examiners?	Yes/All
Were the arrangements for degree classification appropriate and applied consistently?	Yes/Always
The new classification algorithm worked extremely well. I appreciated the efficiency of the process and the board meeting.	

Was consideration of borderline performances conducted fairly and equitably, and in line with College procedures?	Yes/Always
If viva voce of potential borderline candidates were used,	
Were suitable arrangements made for you to conduct viva voce examinations?	N/A
Was the purpose of conducting a viva voce examination and the criteria for selecting candidates for a viva voce clear?	N/A

Were the College procedures governing mitigating circumstances and/or academic misconduct (e.g. plagiarism cases) considered and applied fairly and equitably to all students?	Yes/Always
In case of mitigating circumstances, the board voted to only exclude modules if they reduce the mark, retaining good modules; this helped addressing some difficult cases where a majority of modules were affected.	

Departmental Response:

Response to Your Last External Examiner Report:

Did you receive the formal written response to your previous External Examiner report (if applicable)	Yes/All
Are you satisfied that the issues raised in the previous report have been or are being addressed?	Yes/All

Departmental Response:

Overview, Recommendations and Good Practice:

Please outline any examples of good or innovative practice in learning, teaching and assessment you would like to highlight with regards to these programme(s):

I felt that the chat between externals and students was particularly instructive. I continue to be very impressed with the per-question examiner comments for students on exams. The comments for externals are also helpful and demonstrate excellent academic standards for marking and feedback.

Please outline any recommendations or suggestions for enhancement you would like to make with regards to these programme(s):

I don't have any strong recommendations. However, the board could consider the following:

- * Evaluate an alternative to Turnitin that is more suitable to marking maths type assessments (I'm familiar with gradescope, which appears to be much better, but I'm sure there are also other solutions).**
- * Consider if the default scaling (up by 5 marks) is appropriate for purpose; if not, switch to a neutral default.**
- * Monitor project marks in the long term. If marks remain consistently extremely high, perhaps the marking criteria need adjusting, if there's a desire to bring them more in line with other module marks. This said, they tend to be a bit higher than module marks also in other institutions, and I believe that some discrepancy is acceptable.**
- * Monitor exam lengths i.e. keeping number of questions and length of answers in check.**

Departmental Response:

Final Exit Report:

Please provide an overview of your term of office, including:

- *any changes in standards of student performance over time
- *major developments in the provision during your tenure
- *the implementation of any recommendations for enhancement
- * any other matters you consider appropriate

Departmental Response:

Overall Confidence Statements

In my opinion, Imperial College London is maintaining the threshold academic standards set for its awards in accordance with the FHEQ and relevant Subject Benchmarks Statements.	Yes
In my opinion the assessment process measures student achievement rigorously and fairly against the intended learning outcomes of the programme and is conducted in line with the College's policies and regulations.	Yes
In my experience the academic standards and the achievements of students are comparable with those in other degree awarding bodies.	Yes

Name and Position of Departmental Respondent:	
Date:	

External Examiner Report (2021-22 Academic Year)

Name of External Examiner	Matthew Turner
Name of Programme	BSc/MSci Mathematics

Appointment Process:

Did you find the appointment process fit for purpose?	
Was the appointment made in a timely manner?	
If you attended the online induction briefing, do you consider that the arrangements were sufficient?	

Programme and Module Information (supplied directly or via a link to an online portal):

Did you receive programme handbooks/specifications (including programme learning outcomes)?	No/None
Did you receive syllabus or module descriptors including learning outcomes at module level?	No/None
Did you receive details of the assessments?	Yes/All
Did you receive sufficient information about the programmes/modules in order to fulfil your role?	Most/Usually
I still didn't receive the module descriptors for the modules I was checking, and so I wasn't 100% sure what material is in the module. That said, being my second year I had more of an idea of what to expect.	

Departmental Response:

Programme and Curriculum Design:

Is the content of the degree programme balanced in relation to stated learning outcomes, e.g. the compulsory modules contain the material you would expect?	Yes/Always
I didn't have any information as to whether the modules I checked were elective or compulsory. I could try and guess which ones were compulsory, and in those cases the material was appropriate for a mathematics degree.	

Is the programme coherent and up-to-date with the expectations of the subject field?	Yes/Always

Do you consider that the programme design is suitable in relation to the following, where applicable? *relevant subject benchmarks, *Professional Statutory Regulatory Body (PSRB) *Accrediting Body requirements	Yes/Always
Comparing the Imperial degree to my knowledge of other mathematics degrees in the UK, the Imperial degree is suitable in relation to the industry standard.	

Assessment Strategy:

In your opinion, overall, are the methods of assessment (including unseen written papers, essay/dissertations, orals, clinical examinations) suitable in relation to the level of study and the intended learning outcomes?	Yes/Always

Is the assessment load comparable and balanced across modules of the same level?	Most/Usually
The undergraduates we spoke to did highlight a bit of imbalance with some modules very hard and much longer than others, but this complaint was not as loud as last year.	

Was the overall assessment load for the programme suitable?	Yes/Always

Departmental Response:

Drafting of Assessments:

Did you receive all of the necessary draft assessments for comment/approval?	Yes/All
Were the nature and level of the tasks appropriate?	Yes/All
Were suitable arrangements in place to consider your comments on the draft assessments?	Yes/All
Did you receive feedback on your comments?	Yes/All

I only got my feedback at the External Examiner's meeting, but as most comments were only minor, this was appropriate.

Marking and Moderation (of examination scripts, assessed coursework, dissertation/project reports, etc.)

Did you receive a sufficient number of scripts and other assessed work across the full grade profile?	Yes/All
Was the general standard and consistency of marking appropriate?	Yes/All
Was there evidence that assessed work had been moderated internally, either through check marking or second marking?	Yes/All
Was the justification of marks clear on the scripts that you reviewed?	Yes/All
Very good second marking, not just summing up the 1st markers marks. For the projects it would be good to have an discussion of 'wildly different grades' added to the project spreadsheet so it's available by default. If you wanted these you could get thes	

Practical Examinations:

Were satisfactory arrangements made for the conduct of practical examinations?	N/A
Was the general standard and consistency of marking appropriate?	N/A

Oral Examinations:

Were satisfactory arrangements made for the conduct of oral assessments (e.g. presentations, poster presentations, etc...)?	Yes/All
Was the assessment of such work appropriate and consistent?	Yes/All

Were the marking schemes/criteria and, where appropriate, model answers, suitable and applied consistently?	Yes/Always

Were the procedures for marking and moderation suitable and applied consistently in line with College policies and regulations?	Yes/Always

Were the grade boundaries for the assessments set at the appropriate level and applied consistency (i.e. the standard required to achieve the threshold mark at each grade boundary)?	Yes/Always

Programme Content Which Has Been Delivered and Assessed by Another Institution:

	Collaborative Modules (modules undertaken at local partner institutions)	Placement Activity (e.g. some or all of an undergraduate study abroad plan)
Was it clear in advance of the Board that students under consideration had undertaken content away from the College?	N/A	Most/Usually
Were the procedures for incorporating marks obtained by students at another institution clear and consistently applied?	N/A	Yes/All
Was any such provision discussed at the Board of Examiners, particularly in relation to progression/award decisions, overall value and consistency with regards to the programme(s) of study?	N/A	Yes/All

Where applicable, please comment on the relevance and integration of placements (provision at a Placement Provider, for example, undergraduate Year Abroad or Year in Industry; placement activity contributing to delivery of a postgraduate project) to the overall programme and their contribution to the programme learning outcomes:

Where applicable, please comment on the relevance and integration of any collaborative modules (modules undertaken at other approved UK HEIs) to the overall programme and their contribution to the programme learning outcomes:

<u>Departmental Response:</u>

Board of Examiners Meeting:

Were you invited to attend the meeting?	Yes/All
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Were you able to attend the meeting, either in person or via video-conferencing?	Yes/All
Was the meeting conducted appropriately, in your opinion?	Yes/All
Were you satisfied with the decisions of the Board of Examiners?	Yes/All
Were the arrangements for degree classification appropriate and applied consistently?	Yes/Always
The new algorithm used by the Department is very good, and I'm very happy with it. It seems to work in a very similar way as to previous years (in that those students promoted a grade in previous years would also be promoted by this new algorithm), which The Exam Board was very well run, with anonymous voting when required.	

Was consideration of borderline performances conducted fairly and equitably, and in line with College procedures?	Yes/Always
If viva voce of potential borderline candidates were used,	
Were suitable arrangements made for you to conduct viva voce examinations?	N/A
Was the purpose of conducting a viva voce examination and the criteria for selecting candidates for a viva voce clear?	N/A

Were the College procedures governing mitigating circumstances and/or academic misconduct (e.g. plagiarism cases) considered and applied fairly and equitably to all students?	Yes/Always

Departmental Response:

Response to Your Last External Examiner Report:

Did you receive the formal written response to your previous External Examiner report (if applicable)	No/None
Are you satisfied that the issues raised in the previous report have been or are being addressed?	Most/Usually
Apparently the team looking after the reports of the Externals were not aware that I had submitted my report and so my payment was slightly delayed. I submitted my report on the day of the Exam Board, as I am doing again, so hopefully the process will be smoother this time around.	

Departmental Response:

Overview, Recommendations and Good Practice:

Please outline any examples of good or innovative practice in learning, teaching and assessment you would like to highlight with regards to these programme(s):

The comments the lecturer gives to the students on the exam questions, and any extra comments given to the externals are very useful. They help to understand the PTEM parameters chosen.

Like last year, the meeting with the undergraduates is really useful and interesting, it allows us to get their impression of the exams and what the Department is doing in relation to exam preparation and teaching in general.

Also, the projects are of an excellent quality again this year.

Comparing to last year, the exam papers were sent to me in a sensible time frame this year, I hope that continues for future years.

Please outline any recommendations or suggestions for enhancement you would like to make with regards to these programme(s):

Just 3 points I want to highlight this year:

1- I am a checker for the Computational PDEs module, and I had to ask to see the marked material for this module, and in fact I only saw marked work for the first and fourth pieces of coursework (which was fine). Perhaps next year the marked work can be made available from the first day of the Externals meeting. Also, for this module I never saw the courseworks prior to them being set. I think I'm supposed to see some of these, because this module is 100% coursework.

2- As mentioned earlier, it would be good to see the discussion between the 2 examiners of projects when there is a large discrepancy between the grades. This was available if you wanted to see it, but it would be good if that was available in the project spreadsheet.

3- I noticed this year that the general move in the PTSM system is to scale up the P, T and S values by 5% by default. I don't understand why this is done. I didn't see it explained anywhere or why it is necessary. Are the exams set too hard? Why can't they be set at a more appropriate level? Is it that coursework only modules have a higher mark so this brings them into line? I think this should be thought about as to why a 5% scaling by default is needed.

Also, this year the PTSM data did not have scatter plots showing why the final values were chosen, or if there were they were not clearly available. Last year we were able to see these I seem to recall, and in future it would be good to see them just to help us to accept the chosen PTSM parameters.

Departmental Response:

Final Exit Report:

Please provide an overview of your term of office, including:

- *any changes in standards of student performance over time
- *major developments in the provision during your tenure

*the implementation of any recommendations for enhancement * any other matters you consider appropriate

<u>Departmental Response:</u>

Overall Confidence Statements

In my opinion, Imperial College London is maintaining the threshold academic standards set for its awards in accordance with the FHEQ and relevant Subject Benchmarks Statements.	Yes
In my opinion the assessment process measures student achievement rigorously and fairly against the intended learning outcomes of the programme and is conducted in line with the College's policies and regulations.	Yes
In my experience the academic standards and the achievements of students are comparable with those in other degree awarding bodies.	Yes

Name and Position of Departmental Respondent:	
Date:	

External Examiner Report (2021-22 Academic Year)

Name of External Examiner	Peter Giesl
Name of Programme	UG Mathematics

Programme and Module Information (supplied directly or via a link to an online portal):

Did you receive programme handbooks/specifications (including programme learning outcomes)?	Yes/All
Did you receive syllabus or module descriptors including learning outcomes at module level?	Yes/All
Did you receive details of the assessments?	Yes/All
Did you receive sufficient information about the programmes/modules in order to fulfil your role?	Yes/All

Departmental Response:

Programme and Curriculum Design:

Is the content of the degree programme balanced in relation to stated learning outcomes, e.g. the compulsory modules contain the material you would expect?	Yes/Always

Is the programme coherent and up-to-date with the expectations of the subject field?	Yes/Always

Do you consider that the programme design is suitable in relation to the following, where applicable? *relevant subject benchmarks, *Professional Statutory Regulatory Body (PSRB) *Accrediting Body requirements	Yes/Always

Assessment Strategy:

In your opinion, overall, are the methods of assessment (including unseen written papers, essay/dissertations, orals, clinical examinations) suitable in relation to the level of study and the intended learning outcomes?	Yes/Always

Is the assessment load comparable and balanced across modules of the same level?	Most/Usually
There is some variation, in particular between coursework-only and exam-based modules.	

Was the overall assessment load for the programme suitable?	Yes/Always

Departmental Response:

Drafting of Assessments:

Did you receive all of the necessary draft assessments for comment/approval?	Yes/All
Were the nature and level of the tasks appropriate?	Yes/All
Were suitable arrangements in place to consider your comments on the draft assessments?	Yes/All
Did you receive feedback on your comments?	Yes/All
I have had access to detailed responses to my comments and I am very happy with the way they have been taken on board.	

Marking and Moderation (of examination scripts, assessed coursework, dissertation/project reports, etc.)

Did you receive a sufficient number of scripts and other assessed work across the full grade profile?	Yes/All
Was the general standard and consistency of marking appropriate?	Yes/All
Was there evidence that assessed work had been moderated internally, either through check marking or second marking?	Yes/All

Was the justification of marks clear on the scripts that you reviewed?	Yes/All

Practical Examinations:

Were satisfactory arrangements made for the conduct of practical examinations?	N/A
Was the general standard and consistency of marking appropriate?	N/A

Oral Examinations:

Were satisfactory arrangements made for the conduct of oral assessments (e.g. presentations, poster presentations, etc...)?	Yes/All
Was the assessment of such work appropriate and consistent?	Yes/All

Were the marking schemes/criteria and, where appropriate, model answers, suitable and applied consistently?	Yes/Always

Were the procedures for marking and moderation suitable and applied consistently in line with College policies and regulations?	Yes/Always

Were the grade boundaries for the assessments set at the appropriate level and applied consistency (i.e. the standard required to achieve the threshold mark at each grade boundary)?	Yes/Always

Programme Content Which Has Been Delivered and Assessed by Another Institution:

	Collaborative Modules (modules undertaken at local partner institutions)	Placement Activity (e.g. some or all of an undergraduate study abroad plan)
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Was it clear in advance of the Board that students under consideration had undertaken content away from the College?	N/A	Yes/All
Were the procedures for incorporating marks obtained by students at another institution clear and consistently applied?	N/A	Yes/All
Was any such provision discussed at the Board of Examiners, particularly in relation to progression/award decisions, overall value and consistency with regards to the programme(s) of study?	N/A	Yes/All

Where applicable, please comment on the relevance and integration of placements (provision at a Placement Provider, for example, undergraduate Year Abroad or Year in Industry; placement activity contributing to delivery of a postgraduate project) to the overall programme and their contribution to the programme learning outcomes:

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Where applicable, please comment on the relevance and integration of any collaborative modules (modules undertaken at other approved UK HEIs) to the overall programme and their contribution to the programme learning outcomes:

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Departmental Response:

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Board of Examiners Meeting:

Were you invited to attend the meeting?	Yes/All
Were you able to attend the meeting, either in person or via video-conferencing?	Yes/All
Was the meeting conducted appropriately, in your opinion?	Yes/All
Were you satisfied with the decisions of the Board of Examiners?	Yes/All
Were the arrangements for degree classification appropriate and applied consistently?	Yes/Always
It would be nice to be at Imperial in person next year, to meet both faculty and students and to get a better sense of the department.	

Was consideration of borderline performances conducted fairly and equitably, and in line with College procedures?	Yes/Always
If viva voce of potential borderline candidates were used,	
Were suitable arrangements made for you to conduct viva voce examinations?	N/A
Was the purpose of conducting a viva voce examination and the criteria for selecting candidates for a viva voce clear?	N/A
The new procedure for borderline cases is quite algorithmic, so there is not much to do any more. This year, the board did an excellent job of a smooth transition between the old and new regulations.	

Were the College procedures governing mitigating circumstances and/or academic misconduct (e.g. plagiarism cases) considered and applied fairly and equitably to all students?	Yes/Always

Departmental Response:

Response to Your Last External Examiner Report:

Did you receive the formal written response to your previous External Examiner report (if applicable)	Yes/All
Are you satisfied that the issues raised in the previous report have been or are being addressed?	Yes/All

Departmental Response:

Overview, Recommendations and Good Practice:

Please outline any examples of good or innovative practice in learning, teaching and assessment you would like to highlight with regards to these programme(s):
very good range of modules, covering a broad range of topics

Please outline any recommendations or suggestions for enhancement you would like to make with regards to these programme(s):

When the first and second markers' project marks are far apart, there is a good process in place to come to a conclusion. I have been given access to the rationale behind each case on request, but it would be good to provide a file with this information in general.

Departmental Response:

Final Exit Report:

Please provide an overview of your term of office, including:

- *any changes in standards of student performance over time
- *major developments in the provision during your tenure
- *the implementation of any recommendations for enhancement
- * any other matters you consider appropriate

Departmental Response:

Overall Confidence Statements

In my opinion, Imperial College London is maintaining the threshold academic standards set for its awards in accordance with the FHEQ and relevant Subject Benchmarks Statements.	Yes
In my opinion the assessment process measures student achievement rigorously and fairly against the intended learning outcomes of the programme and is conducted in line with the College's policies and regulations.	Yes
In my experience the academic standards and the achievements of students are comparable with those in other degree awarding bodies.	Yes

Name and Position of Departmental Respondent:	
Date:	

External Examiner Report (2021-22 Academic Year)

Name of External Examiner	David Leslie
Name of Programme	MSc Machine Learning and Data Science

Appointment Process:

Did you find the appointment process fit for purpose?	Yes/All
Was the appointment made in a timely manner?	Yes/All
If you attended the online induction briefing, do you consider that the arrangements were sufficient?	Yes/All

Programme and Module Information (supplied directly or via a link to an online portal):

Did you receive programme handbooks/specifications (including programme learning outcomes)?	Most/Usually
Did you receive syllabus or module descriptors including learning outcomes at module level?	Most/Usually
Did you receive details of the assessments?	Yes/All
Did you receive sufficient information about the programmes/modules in order to fulfil your role?	Yes/All

Departmental Response:

Programme and Curriculum Design:

Is the content of the degree programme balanced in relation to stated learning outcomes, e.g. the compulsory modules contain the material you would expect?	Yes/Always

Is the programme coherent and up-to-date with the expectations of the subject field?	Yes/Always

Do you consider that the programme design is suitable in relation to the following, where applicable? *relevant subject benchmarks, *Professional Statutory Regulatory Body (PSRB) *Accrediting Body requirements	Yes/Always

Assessment Strategy:

In your opinion, overall, are the methods of assessment (including unseen written papers, essay/dissertations, orals, clinical examinations) suitable in relation to the level of study and the intended learning outcomes?	Yes/Always

Is the assessment load comparable and balanced across modules of the same level?	Yes/Always

Was the overall assessment load for the programme suitable?	Yes/Always

Departmental Response:

Drafting of Assessments:

Did you receive all of the necessary draft assessments for comment/approval?	Yes/All
Were the nature and level of the tasks appropriate?	Yes/All
Were suitable arrangements in place to consider your comments on the draft assessments?	Yes/All
Did you receive feedback on your comments?	Yes/All

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Marking and Moderation (of examination scripts, assessed coursework, dissertation/project reports, etc.)

Did you receive a sufficient number of scripts and other assessed work across the full grade profile?	N/A
Was the general standard and consistency of marking appropriate?	N/A
Was there evidence that assessed work had been moderated internally, either through check marking or second marking?	N/A
Was the justification of marks clear on the scripts that you reviewed?	N/A
With all assessment being online coursework, there was very little moderation of marking that I could do.	

Practical Examinations:

Were satisfactory arrangements made for the conduct of practical examinations?	N/A
Was the general standard and consistency of marking appropriate?	N/A
So far as I am aware, there were no practical examinations	

Oral Examinations:

Were satisfactory arrangements made for the conduct of oral assessments (e.g. presentations, poster presentations, etc...)?	N/A
Was the assessment of such work appropriate and consistent?	N/A
So far as I am aware, there were no oral assessments.	

Were the marking schemes/criteria and, where appropriate, model answers, suitable and applied consistently?	Yes/Always

Were the procedures for marking and moderation suitable and applied consistently in line with College policies and regulations?	Yes/Always

Were the grade boundaries for the assessments set at the appropriate level and applied consistency (i.e. the standard required to achieve the threshold mark at each grade boundary)?	

Programme Content Which Has Been Delivered and Assessed by Another Institution:

	Collaborative Modules (modules undertaken at local partner institutions)	Placement Activity (e.g. some or all of an undergraduate study abroad plan)
Was it clear in advance of the Board that students under consideration had undertaken content away from the College?	N/A	N/A
Were the procedures for incorporating marks obtained by students at another institution clear and consistently applied?	N/A	N/A
Was any such provision discussed at the Board of Examiners, particularly in relation to progression/award decisions, overall value and consistency with regards to the programme(s) of study?	N/A	N/A

Where applicable, please comment on the relevance and integration of placements (provision at a Placement Provider, for example, undergraduate Year Abroad or Year in Industry; placement activity contributing to delivery of a postgraduate project) to the overall programme and their contribution to the programme learning outcomes:

Where applicable, please comment on the relevance and integration of any collaborative modules (modules undertaken at other approved UK HEIs) to the overall programme and their contribution to the programme learning outcomes:

<u>Departmental Response:</u>

Board of Examiners Meeting:

Were you invited to attend the meeting?	Yes/All
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Were you able to attend the meeting, either in person or via video-conferencing?	Yes/All
Was the meeting conducted appropriately, in your opinion?	Yes/All
Were you satisfied with the decisions of the Board of Examiners?	Yes/All
Were the arrangements for degree classification appropriate and applied consistently?	Yes/Always

Was consideration of borderline performances conducted fairly and equitably, and in line with College procedures?	
If viva voce of potential borderline candidates were used,	
Were suitable arrangements made for you to conduct viva voce examinations?	N/A
Was the purpose of conducting a viva voce examination and the criteria for selecting candidates for a viva voce clear?	N/A

Were the College procedures governing mitigating circumstances and/or academic misconduct (e.g. plagiarism cases) considered and applied fairly and equitably to all students?	Yes/Always

Departmental Response:

Overview, Recommendations and Good Practice:

Please outline any examples of good or innovative practice in learning, teaching and assessment you would like to highlight with regards to these programme(s):

This is an innovative curriculum, designed to be delivered through new channels. It is high quality, and impressively delivered.

Please outline any recommendations or suggestions for enhancement you would like to make with regards to these programme(s):

Departmental Response:

Final Exit Report:

Please provide an overview of your term of office, including:

- *any changes in standards of student performance over time
- *major developments in the provision during your tenure
- *the implementation of any recommendations for enhancement
- * any other matters you consider appropriate

Departmental Response:

Overall Confidence Statements

In my opinion, Imperial College London is maintaining the threshold academic standards set for its awards in accordance with the FHEQ and relevant Subject Benchmarks Statements.	Yes
In my opinion the assessment process measures student achievement rigorously and fairly against the intended learning outcomes of the programme and is conducted in line with the College's policies and regulations.	Yes
In my experience the academic standards and the achievements of students are comparable with those in other degree awarding bodies.	Yes

Name and Position of Departmental Respondent:	
Date:	

External Examiner Report (2021-22 Academic Year)

Name of External Examiner	Eugene Lytvynov
Name of Programme	MSc Pure Mathematics

Programme and Module Information (supplied directly or via a link to an online portal):

Did you receive programme handbooks/specifications (including programme learning outcomes)?	Yes/All
Did you receive syllabus or module descriptors including learning outcomes at module level?	Yes/All
Did you receive details of the assessments?	Yes/All
Did you receive sufficient information about the programmes/modules in order to fulfil your role?	Yes/All

Departmental Response:

Programme and Curriculum Design:

Is the content of the degree programme balanced in relation to stated learning outcomes, e.g. the compulsory modules contain the material you would expect?	Yes/Always

Is the programme coherent and up-to-date with the expectations of the subject field?	Yes/Always

Do you consider that the programme design is suitable in relation to the following, where applicable? *relevant subject benchmarks, *Professional Statutory Regulatory Body (PSRB) *Accrediting Body requirements	Yes/Always

Assessment Strategy:

In your opinion, overall, are the methods of assessment (including unseen written papers, essay/dissertations, orals, clinical examinations) suitable in relation to the level of study and the intended learning outcomes?	Yes/Always

Is the assessment load comparable and balanced across modules of the same level?	Yes/Always

Was the overall assessment load for the programme suitable?	Yes/Always

Departmental Response:

Drafting of Assessments:

Did you receive all of the necessary draft assessments for comment/approval?	Yes/All
Were the nature and level of the tasks appropriate?	Yes/All
Were suitable arrangements in place to consider your comments on the draft assessments?	Yes/All
Did you receive feedback on your comments?	Yes/All

Marking and Moderation (of examination scripts, assessed coursework, dissertation/project reports, etc.)

Did you receive a sufficient number of scripts and other assessed work across the full grade profile?	Yes/All
Was the general standard and consistency of marking appropriate?	Yes/All
Was there evidence that assessed work had been moderated internally, either through check marking or second marking?	Yes/All

Was the justification of marks clear on the scripts that you reviewed?	Yes/All

Practical Examinations:

Were satisfactory arrangements made for the conduct of practical examinations?	N/A
Was the general standard and consistency of marking appropriate?	N/A

Oral Examinations:

Were satisfactory arrangements made for the conduct of oral assessments (e.g. presentations, poster presentations, etc...)?	Yes/All
Was the assessment of such work appropriate and consistent?	Yes/All

Were the marking schemes/criteria and, where appropriate, model answers, suitable and applied consistently?	Yes/Always

Were the procedures for marking and moderation suitable and applied consistently in line with College policies and regulations?	Yes/Always

Were the grade boundaries for the assessments set at the appropriate level and applied consistency (i.e. the standard required to achieve the threshold mark at each grade boundary)?	Yes/Always

Programme Content Which Has Been Delivered and Assessed by Another Institution:

	Collaborative Modules (modules undertaken at local partner institutions)	Placement Activity (e.g. some or all of an undergraduate study abroad plan)
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Was it clear in advance of the Board that students under consideration had undertaken content away from the College?	N/A	N/A
Were the procedures for incorporating marks obtained by students at another institution clear and consistently applied?	N/A	N/A
Was any such provision discussed at the Board of Examiners, particularly in relation to progression/award decisions, overall value and consistency with regards to the programme(s) of study?	N/A	N/A

Where applicable, please comment on the relevance and integration of placements (provision at a Placement Provider, for example, undergraduate Year Abroad or Year in Industry; placement activity contributing to delivery of a postgraduate project) to the overall programme and their contribution to the programme learning outcomes:

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Where applicable, please comment on the relevance and integration of any collaborative modules (modules undertaken at other approved UK HEIs) to the overall programme and their contribution to the programme learning outcomes:

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Departmental Response:

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Board of Examiners Meeting:

Were you invited to attend the meeting?	Yes/All
Were you able to attend the meeting, either in person or via video-conferencing?	Yes/All
Was the meeting conducted appropriately, in your opinion?	Yes/All
Were you satisfied with the decisions of the Board of Examiners?	Yes/All
Were the arrangements for degree classification appropriate and applied consistently?	Yes/Always

Was consideration of borderline performances conducted fairly and equitably, and in line with College procedures?	Yes/Always
If viva voce of potential borderline candidates were used,	
Were suitable arrangements made for you to conduct viva voce examinations?	N/A
Was the purpose of conducting a viva voce examination and the criteria for selecting candidates for a viva voce clear?	N/A

Were the College procedures governing mitigating circumstances and/or academic misconduct (e.g. plagiarism cases) considered and applied fairly and equitably to all students?	Yes/Always

Departmental Response:

Response to Your Last External Examiner Report:

Did you receive the formal written response to your previous External Examiner report (if applicable)	Yes/All
Are you satisfied that the issues raised in the previous report have been or are being addressed?	Yes/All

Departmental Response:

Overview, Recommendations and Good Practice:

Please outline any examples of good or innovative practice in learning, teaching and assessment you would like to highlight with regards to these programme(s):
In the academic year 2021/22, all modules were taught through a mixture of in-person teaching (2 lectures per week) and online teaching (2 hours of videos per week). This allowed to provide a substantial amount of in-person teaching and also support those students who were not able to attend the teaching hours in person. Also the online material complemented the material discussed in in-person lectures.

The Department had to take a difficult decision on how to conduct examinations: in-person or online. In normal circumstances, in-person examinations are certainly preferable. However, due to ongoing Covid pandemic, students with even very mild symptoms of Covid would not be able to attend their exams. Furthermore, it would be essentially impossible to distinguish between fair and unfair claims of students that they have to self-isolate and require an exam deferral. In view of this, the Department decided to conduct all exams online, and I believe this was a correct decision. The exams outcome was very much in-line with pre-Covid, in-person results. For exams in almost all modules, very little scaling was applied. For comparison, in my Department of Swansea University, we had our exams in May-June in person, and we had an unusually high number of students requiring exam.

The level of supervision of MSc dissertations was at the highest level. As a result, all MSc dissertations were at a good level and the top-marked dissertations were of exceptionally high standard.

Please outline any recommendations or suggestions for enhancement you would like to make with regards to these programme(s):

I would recommend to investigate a possibility of providing students with videos for their modules also in future, even if the pandemic-related arrangements are over. One could think of either providing recordings of in-person lectures, or specially recorded videos, as it was the case in 2021/22. (In the latter case, one may recycle videos from previous years whenever possible.) I believe many UK universities are currently moving towards providing recordings of in-person lectures.

It is quite likely that, in the academic year 2022-23, all exams will be again in person. One could think about a policy which would allow students to bring in to the exam venue a page or so of materials prepared for the exam, to reduce the stress of memorising difficult facts. I think this would be an important development which would require further investigation, but all-in-all it would probably make sense to try it and see whether it leads to any significant changes in the preparation for exams.

Departmental Response:

Final Exit Report:

Please provide an overview of your term of office, including:

- *any changes in standards of student performance over time
- *major developments in the provision during your tenure
- *the implementation of any recommendations for enhancement
- * any other matters you consider appropriate

Departmental Response:

Overall Confidence Statements

In my opinion, Imperial College London is maintaining the threshold academic standards set for its awards in accordance with the FHEQ and relevant Subject Benchmarks Statements.	Yes
In my opinion the assessment process measures student achievement rigorously and fairly against the intended learning outcomes of the programme and is conducted in line with the College's policies and regulations.	Yes
In my experience the academic standards and the achievements of students are comparable with those in other degree awarding bodies.	Yes

Name and Position of Departmental Respondent:	
Date:	

External Examiner Report (2021-22 Academic Year)

Name of External Examiner	Jason Lotay
Name of Programme	Mathematics MSc

Appointment Process:

Did you find the appointment process fit for purpose?	Yes/All
Was the appointment made in a timely manner?	Yes/All
If you attended the online induction briefing, do you consider that the arrangements were sufficient?	Yes/All
It would have been good to have been made aware of all the key timings involved, such as the meetings, deadlines for comments on exams, dissertations being made available etc.	

Programme and Module Information (supplied directly or via a link to an online portal):

Did you receive programme handbooks/specifications (including programme learning outcomes)?	Most/Usually
Did you receive syllabus or module descriptors including learning outcomes at module level?	Most/Usually
Did you receive details of the assessments?	Most/Usually
Did you receive sufficient information about the programmes/modules in order to fulfil your role?	Most/Usually

Departmental Response:

Programme and Curriculum Design:

Is the content of the degree programme balanced in relation to stated learning outcomes, e.g. the compulsory modules contain the material you would expect?	Yes/Always

Is the programme coherent and up-to-date with the expectations of the subject field?	Yes/Always

Do you consider that the programme design is suitable in relation to the following, where applicable? *relevant subject benchmarks, *Professional Statutory Regulatory Body (PSRB) *Accrediting Body requirements	Yes/Always

Assessment Strategy:

In your opinion, overall, are the methods of assessment (including unseen written papers, essay/dissertations, orals, clinical examinations) suitable in relation to the level of study and the intended learning outcomes?	Yes/Always

Is the assessment load comparable and balanced across modules of the same level?	Yes/Always

Was the overall assessment load for the programme suitable?	Yes/Always

Departmental Response:

Drafting of Assessments:

Did you receive all of the necessary draft assessments for comment/approval?	Most/Usually
Were the nature and level of the tasks appropriate?	Yes/All
Were suitable arrangements in place to consider your comments on the draft assessments?	No/None
Did you receive feedback on your comments?	No/None

I did not receive all of the assessments I was supposed to comment on and never received feedback on my comments. This should be addressed in future.

Marking and Moderation (of examination scripts, assessed coursework, dissertation/project reports, etc.)

Did you receive a sufficient number of scripts and other assessed work across the full grade profile?	Yes/All
Was the general standard and consistency of marking appropriate?	Most/Usually
Was there evidence that assessed work had been moderated internally, either through check marking or second marking?	Yes/All
Was the justification of marks clear on the scripts that you reviewed?	Yes/All
I raised the issue during the final exam meeting about the marking of projects. There seemed to be problems with marks being awarded that were much too low or too high. Whilst moderation dealt with this issue effectively, it would be good to either give further training/guidance to markers so such clear errors do not occur in future, possibly with the addition of a senior colleague known for marking consistently with the guidance to aid in marking each project. This is clearly an issue that bedevils all project marking to some degree, but I think there are steps which can be taken to help address it.	

Practical Examinations:

Were satisfactory arrangements made for the conduct of practical examinations?	N/A
Was the general standard and consistency of marking appropriate?	N/A

Oral Examinations:

Were satisfactory arrangements made for the conduct of oral assessments (e.g. presentations, poster presentations, etc...)?	No/None
Was the assessment of such work appropriate and consistent?	No/None
There were oral examinations, but I had no indication as to how they were marked and whether this was done in a satisfactory manner.	

Were the marking schemes/criteria and, where appropriate, model answers, suitable and applied consistently?	Most/Usually

Were the procedures for marking and moderation suitable and applied consistently in line with College policies and regulations?	Yes/Always

Were the grade boundaries for the assessments set at the appropriate level and applied consistency (i.e. the standard required to achieve the threshold mark at each grade boundary)?	Most/Usually
Sometimes during the final exam board meeting it became clear that the rules and regulations were not known to the chair, nor to many other members of the board. This is something that should be rectified in future.	

Programme Content Which Has Been Delivered and Assessed by Another Institution:

	Collaborative Modules (modules undertaken at local partner institutions)	Placement Activity (e.g. some or all of an undergraduate study abroad plan)
Was it clear in advance of the Board that students under consideration had undertaken content away from the College?	N/A	N/A
Were the procedures for incorporating marks obtained by students at another institution clear and consistently applied?	N/A	N/A
Was any such provision discussed at the Board of Examiners, particularly in relation to progression/award decisions, overall value and consistency with regards to the programme(s) of study?	N/A	N/A

Where applicable, please comment on the relevance and integration of placements (provision at a Placement Provider, for example, undergraduate Year Abroad or Year in Industry; placement activity contributing to delivery of a postgraduate project) to the overall programme and their contribution to the programme learning outcomes:

Where applicable, please comment on the relevance and integration of any collaborative modules (modules undertaken at other approved UK HEIs) to the overall programme and their contribution to the programme learning outcomes:

<u>Departmental Response:</u>

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Board of Examiners Meeting:

Were you invited to attend the meeting?	Yes/All
Were you able to attend the meeting, either in person or via video-conferencing?	Yes/All
Was the meeting conducted appropriately, in your opinion?	Most/Usually
Were you satisfied with the decisions of the Board of Examiners?	Yes/All
Were the arrangements for degree classification appropriate and applied consistently?	Most/Usually
As stated before, there seemed to be some confusion regarding the various rules and regulations, so the board and the chair in particular should be up to speed with this in advance of the meeting.	

Was consideration of borderline performances conducted fairly and equitably, and in line with College procedures?	Most/Usually
If viva voce of potential borderline candidates were used,	
Were suitable arrangements made for you to conduct viva voce examinations?	N/A
Was the purpose of conducting a viva voce examination and the criteria for selecting candidates for a viva voce clear?	N/A

Were the College procedures governing mitigating circumstances and/or academic misconduct (e.g. plagiarism cases) considered and applied fairly and equitably to all students?	Most/Usually

Departmental Response:

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Overview, Recommendations and Good Practice:

Please outline any examples of good or innovative practice in learning, teaching and assessment you would like to highlight with regards to these programme(s):

I think in general the programme seems well run.

Please outline any recommendations or suggestions for enhancement you would like to make with regards to these programme(s):

I think the programme is quite well designed and aside from some of the procedural points I made earlier I have nothing to suggest in terms of improvements.

Departmental Response:

Final Exit Report:

Please provide an overview of your term of office, including:

- *any changes in standards of student performance over time
- *major developments in the provision during your tenure
- *the implementation of any recommendations for enhancement
- * any other matters you consider appropriate

Departmental Response:

Overall Confidence Statements

In my opinion, Imperial College London is maintaining the threshold academic standards set for its awards in accordance with the FHEQ and relevant Subject Benchmarks Statements.	Yes
In my opinion the assessment process measures student achievement rigorously and fairly against the intended learning outcomes of the programme and is conducted in line with the College's policies and regulations.	Yes
In my experience the academic standards and the achievements of students are comparable with those in other degree awarding bodies.	Yes

Name and Position of Departmental Respondent:	
Date:	

External Examiner Report (2021-22 Academic Year)

Name of External Examiner	Eugene Lytvynov
Name of Programme	BSc/MSci Mathematics, BEng/MEng Joint Mathematics and Computing

Appointment Process:

Did you find the appointment process fit for purpose?	
Was the appointment made in a timely manner?	
If you attended the online induction briefing, do you consider that the arrangements were sufficient?	

Programme and Module Information (supplied directly or via a link to an online portal):

Did you receive programme handbooks/specifications (including programme learning outcomes)?	Yes/All
Did you receive syllabus or module descriptors including learning outcomes at module level?	Yes/All
Did you receive details of the assessments?	Yes/All
Did you receive sufficient information about the programmes/modules in order to fulfil your role?	Yes/All

Departmental Response:

Programme and Curriculum Design:

Is the content of the degree programme balanced in relation to stated learning outcomes, e.g. the compulsory modules contain the material you would expect?	Yes/Always

Is the programme coherent and up-to-date with the expectations of the subject field?	Yes/Always

Do you consider that the programme design is suitable in relation to the following, where applicable? *relevant subject benchmarks, *Professional Statutory Regulatory Body (PSRB) *Accrediting Body requirements	Yes/Always

Assessment Strategy:

In your opinion, overall, are the methods of assessment (including unseen written papers, essay/dissertations, orals, clinical examinations) suitable in relation to the level of study and the intended learning outcomes?	Yes/Always

Is the assessment load comparable and balanced across modules of the same level?	Yes/Always

Was the overall assessment load for the programme suitable?	Yes/Always

Departmental Response:

Drafting of Assessments:

Did you receive all of the necessary draft assessments for comment/approval?	Yes/All
Were the nature and level of the tasks appropriate?	Yes/All
Were suitable arrangements in place to consider your comments on the draft assessments?	Yes/All
Did you receive feedback on your comments?	Yes/All

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Marking and Moderation (of examination scripts, assessed coursework, dissertation/project reports, etc.)

Did you receive a sufficient number of scripts and other assessed work across the full grade profile?	Yes/All
Was the general standard and consistency of marking appropriate?	Yes/All
Was there evidence that assessed work had been moderated internally, either through check marking or second marking?	Yes/All
Was the justification of marks clear on the scripts that you reviewed?	Yes/All

Practical Examinations:

Were satisfactory arrangements made for the conduct of practical examinations?	Yes/All
Was the general standard and consistency of marking appropriate?	Yes/All

Oral Examinations:

Were satisfactory arrangements made for the conduct of oral assessments (e.g. presentations, poster presentations, etc...)?	Yes/All
Was the assessment of such work appropriate and consistent?	Yes/All

Were the marking schemes/criteria and, where appropriate, model answers, suitable and applied consistently?	Yes/Always

Were the procedures for marking and moderation suitable and applied consistently in line with College policies and regulations?	Yes/Always

Were the grade boundaries for the assessments set at the appropriate level and applied consistency (i.e. the standard required to achieve the threshold mark at each grade boundary)?	Yes/Always

Programme Content Which Has Been Delivered and Assessed by Another Institution:

	Collaborative Modules (modules undertaken at local partner institutions)	Placement Activity (e.g. some or all of an undergraduate study abroad plan)
Was it clear in advance of the Board that students under consideration had undertaken content away from the College?	N/A	N/A
Were the procedures for incorporating marks obtained by students at another institution clear and consistently applied?	N/A	N/A
Was any such provision discussed at the Board of Examiners, particularly in relation to progression/award decisions, overall value and consistency with regards to the programme(s) of study?	N/A	N/A

Where applicable, please comment on the relevance and integration of placements (provision at a Placement Provider, for example, undergraduate Year Abroad or Year in Industry; placement activity contributing to delivery of a postgraduate project) to the overall programme and their contribution to the programme learning outcomes:

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Where applicable, please comment on the relevance and integration of any collaborative modules (modules undertaken at other approved UK HEIs) to the overall programme and their contribution to the programme learning outcomes:

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Departmental Response:

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Board of Examiners Meeting:

Were you invited to attend the meeting?	Yes/All
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Were you able to attend the meeting, either in person or via video-conferencing?	Yes/All
Was the meeting conducted appropriately, in your opinion?	Yes/All
Were you satisfied with the decisions of the Board of Examiners?	Yes/All
Were the arrangements for degree classification appropriate and applied consistently?	Yes/Always
The Exam Board processes was organised very effectively.	

Was consideration of borderline performances conducted fairly and equitably, and in line with College procedures?	Yes/Always
If viva voce of potential borderline candidates were used,	
Were suitable arrangements made for you to conduct viva voce examinations?	N/A
Was the purpose of conducting a viva voce examination and the criteria for selecting candidates for a viva voce clear?	N/A

Were the College procedures governing mitigating circumstances and/or academic misconduct (e.g. plagiarism cases) considered and applied fairly and equitably to all students?	Yes/Always

Departmental Response:

Response to Your Last External Examiner Report:

Did you receive the formal written response to your previous External Examiner report (if applicable)	Yes/All
Are you satisfied that the issues raised in the previous report have been or are being addressed?	Yes/All

Departmental Response:

Overview, Recommendations and Good Practice:

Please outline any examples of good or innovative practice in learning, teaching and assessment you would like to highlight with regards to these programme(s):

In the academic year 2021/22, all modules were taught through a mixture of in-person teaching (2 lectures per week) and online teaching (2 hours of videos per week). In the meeting of the external examiners with the student representatives, the students highly praised such an approach. Several students said that they liked the possibility to pause the video and think on what was discussed by the lecturer. On the other hand, in-person lectures are extremely important for any proper studies of mathematics.

The Department had to take a difficult decision on how to conduct examinations: in-person or online. In normal circumstances, in-person examinations are certainly preferable. However, due to ongoing Covid pandemic, students with even very mild symptoms of Covid would not be able to attend their exams. Furthermore, it would be essentially impossible to distinguish between fair and unfair claims of students that they have to self-isolate and require an exam deferral. In view of this, the Department decided to conduct all exams online, and I believe this was a correct decision. The exams' outcome was very much in-line with pre-Covid, in-person results. For exams in almost all modules, very little scaling was applied. For comparison, in my Department of Swansea University, we had our exams in May-June in person, and we had an unusually high number of students requiring exam deferrals.

Please outline any recommendations or suggestions for enhancement you would like to make with regards to these programme(s):

As mentioned before, the students liked very much the available videos for the modules they studied. When asked if they would like to have access to recordings of in-person lectures, the reply was a definite yes. So I would suggest to investigate a possibility of providing students with videos for their modules also in future, even if the pandemic-related arrangements are over. One could think of either providing recordings of in-person lectures, or specially recorded videos, as it was the case in 2021/22. (In the latter case, one may recycle videos from previous years whenever possible.) I believe many UK universities are currently moving towards providing recordings of in-person lectures.

It is quite likely that, in the coming academic year, all exams will be again in person. The students told the external examiners that many are eager to use their notes during exams, to reduce the volume of the material to be memorised. One student even argued in favour of open-book exams. I am also aware that the Department is considering a possibility of allowing students to bring in to each exam a page or so of pre-prepared materials. I think this is a very important development which requires further investigation, but all-in-all it would probably make sense to try it and see whether it makes any significant difference.

Departmental Response:

Final Exit Report:

Please provide an overview of your term of office, including:
*any changes in standards of student performance over time

- *major developments in the provision during your tenure
- *the implementation of any recommendations for enhancement
- * any other matters you consider appropriate

Departmental Response:

Overall Confidence Statements

In my opinion, Imperial College London is maintaining the threshold academic standards set for its awards in accordance with the FHEQ and relevant Subject Benchmarks Statements.	Yes
In my opinion the assessment process measures student achievement rigorously and fairly against the intended learning outcomes of the programme and is conducted in line with the College's policies and regulations.	Yes
In my experience the academic standards and the achievements of students are comparable with those in other degree awarding bodies.	Yes

Name and Position of Departmental Respondent:	
Date:	

External Examiner Report (2021-22 Academic Year)

Name of External Examiner	Peter Giesl
Name of Programme	MSc Applied Mathematics

Programme and Module Information (supplied directly or via a link to an online portal):

Did you receive programme handbooks/specifications (including programme learning outcomes)?	Yes/All
Did you receive syllabus or module descriptors including learning outcomes at module level?	Yes/All
Did you receive details of the assessments?	Yes/All
Did you receive sufficient information about the programmes/modules in order to fulfil your role?	Yes/All

Departmental Response:

Programme and Curriculum Design:

Is the content of the degree programme balanced in relation to stated learning outcomes, e.g. the compulsory modules contain the material you would expect?	Yes/Always

Is the programme coherent and up-to-date with the expectations of the subject field?	Yes/Always

Do you consider that the programme design is suitable in relation to the following, where applicable? *relevant subject benchmarks, *Professional Statutory Regulatory Body (PSRB) *Accrediting Body requirements	Yes/Always

Assessment Strategy:

In your opinion, overall, are the methods of assessment (including unseen written papers, essay/dissertations, orals, clinical examinations) suitable in relation to the level of study and the intended learning outcomes?	Yes/Always

Is the assessment load comparable and balanced across modules of the same level?	Yes/Always

Was the overall assessment load for the programme suitable?	Yes/Always

Departmental Response:

Drafting of Assessments:

Did you receive all of the necessary draft assessments for comment/approval?	Yes/All
Were the nature and level of the tasks appropriate?	Yes/All
Were suitable arrangements in place to consider your comments on the draft assessments?	Yes/All
Did you receive feedback on your comments?	Yes/All

Marking and Moderation (of examination scripts, assessed coursework, dissertation/project reports, etc.)

Did you receive a sufficient number of scripts and other assessed work across the full grade profile?	Yes/All
Was the general standard and consistency of marking appropriate?	Yes/All
Was there evidence that assessed work had been moderated internally, either through check marking or second marking?	Yes/All

Was the justification of marks clear on the scripts that you reviewed?	Yes/All

Practical Examinations:

Were satisfactory arrangements made for the conduct of practical examinations?	N/A
Was the general standard and consistency of marking appropriate?	N/A

Oral Examinations:

Were satisfactory arrangements made for the conduct of oral assessments (e.g. presentations, poster presentations, etc...)?	Yes/All
Was the assessment of such work appropriate and consistent?	Yes/All

Were the marking schemes/criteria and, where appropriate, model answers, suitable and applied consistently?	Yes/Always

Were the procedures for marking and moderation suitable and applied consistently in line with College policies and regulations?	Yes/Always

Were the grade boundaries for the assessments set at the appropriate level and applied consistency (i.e. the standard required to achieve the threshold mark at each grade boundary)?	Yes/Always

Programme Content Which Has Been Delivered and Assessed by Another Institution:

	Collaborative Modules (modules undertaken at local partner institutions)	Placement Activity (e.g. some or all of an undergraduate study abroad plan)
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Was it clear in advance of the Board that students under consideration had undertaken content away from the College?	N/A	N/A
Were the procedures for incorporating marks obtained by students at another institution clear and consistently applied?	N/A	N/A
Was any such provision discussed at the Board of Examiners, particularly in relation to progression/award decisions, overall value and consistency with regards to the programme(s) of study?	N/A	N/A

Where applicable, please comment on the relevance and integration of placements (provision at a Placement Provider, for example, undergraduate Year Abroad or Year in Industry; placement activity contributing to delivery of a postgraduate project) to the overall programme and their contribution to the programme learning outcomes:

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Where applicable, please comment on the relevance and integration of any collaborative modules (modules undertaken at other approved UK HEIs) to the overall programme and their contribution to the programme learning outcomes:

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Departmental Response:

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Board of Examiners Meeting:

Were you invited to attend the meeting?	Yes/All
Were you able to attend the meeting, either in person or via video-conferencing?	Yes/All
Was the meeting conducted appropriately, in your opinion?	Yes/All
Were you satisfied with the decisions of the Board of Examiners?	Yes/All
Were the arrangements for degree classification appropriate and applied consistently?	Yes/Always
Careful consideration was given to the fact that the classification rules slightly changed from last year and that it was fair overall.	

Was consideration of borderline performances conducted fairly and equitably, and in line with College procedures?	Yes/Always
If viva voce of potential borderline candidates were used,	
Were suitable arrangements made for you to conduct viva voce examinations?	N/A
Was the purpose of conducting a viva voce examination and the criteria for selecting candidates for a viva voce clear?	N/A

Were the College procedures governing mitigating circumstances and/or academic misconduct (e.g. plagiarism cases) considered and applied fairly and equitably to all students?	Yes/Always

<u>Departmental Response:</u>

Response to Your Last External Examiner Report:

Did you receive the formal written response to your previous External Examiner report (if applicable)	Yes/All
Are you satisfied that the issues raised in the previous report have been or are being addressed?	Yes/All

<u>Departmental Response:</u>

Overview, Recommendations and Good Practice:

Please outline any examples of good or innovative practice in learning, teaching and assessment you would like to highlight with regards to these programme(s):
There were some outstanding projects!

Please outline any recommendations or suggestions for enhancement you would like to make with regards to these programme(s):
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On some rare occasion, the marker did not put written comments in each of the subcategories for the projects. If the two markers for a project were far apart, it would be helpful to have a written comment on how the joint mark was agreed.

Departmental Response:

Final Exit Report:

Please provide an overview of your term of office, including:

- *any changes in standards of student performance over time
- *major developments in the provision during your tenure
- *the implementation of any recommendations for enhancement
- * any other matters you consider appropriate

Departmental Response:

Overall Confidence Statements

In my opinion, Imperial College London is maintaining the threshold academic standards set for its awards in accordance with the FHEQ and relevant Subject Benchmarks Statements.	Yes
In my opinion the assessment process measures student achievement rigorously and fairly against the intended learning outcomes of the programme and is conducted in line with the College's policies and regulations.	Yes
In my experience the academic standards and the achievements of students are comparable with those in other degree awarding bodies.	Yes

Name and Position of Departmental Respondent:	
Date:	

External Examiner Report (2021-22 Academic Year)

Name of External Examiner	Matthew Turner
Name of Programme	Applied Mathematics MSc

Programme and Module Information (supplied directly or via a link to an online portal):

Did you receive programme handbooks/specifications (including programme learning outcomes)?	No/None
Did you receive syllabus or module descriptors including learning outcomes at module level?	No/None
Did you receive details of the assessments?	Most/Usually
Did you receive sufficient information about the programmes/modules in order to fulfil your role?	Yes/All

Departmental Response:

Programme and Curriculum Design:

Is the content of the degree programme balanced in relation to stated learning outcomes, e.g. the compulsory modules contain the material you would expect?	Yes/Always

Is the programme coherent and up-to-date with the expectations of the subject field?	Yes/Always

Do you consider that the programme design is suitable in relation to the following, where applicable? *relevant subject benchmarks, *Professional Statutory Regulatory Body (PSRB) *Accrediting Body requirements	Yes/Always

Assessment Strategy:

In your opinion, overall, are the methods of assessment (including unseen written papers, essay/dissertations, orals, clinical examinations) suitable in relation to the level of study and the intended learning outcomes?	Yes/Always

Is the assessment load comparable and balanced across modules of the same level?	Yes/Always

Was the overall assessment load for the programme suitable?	Yes/Always

Departmental Response:

Drafting of Assessments:

Did you receive all of the necessary draft assessments for comment/approval?	Yes/All
Were the nature and level of the tasks appropriate?	Yes/All
Were suitable arrangements in place to consider your comments on the draft assessments?	Yes/All
Did you receive feedback on your comments?	Yes/All
All assessments of suitable level.	

Marking and Moderation (of examination scripts, assessed coursework, dissertation/project reports, etc.)

Did you receive a sufficient number of scripts and other assessed work across the full grade profile?	Yes/All
Was the general standard and consistency of marking appropriate?	Yes/All
Was there evidence that assessed work had been moderated internally, either through check marking or second marking?	Yes/All

Was the justification of marks clear on the scripts that you reviewed?	Yes/All

Practical Examinations:

Were satisfactory arrangements made for the conduct of practical examinations?	N/A
Was the general standard and consistency of marking appropriate?	N/A

Oral Examinations:

Were satisfactory arrangements made for the conduct of oral assessments (e.g. presentations, poster presentations, etc...)?	N/A
Was the assessment of such work appropriate and consistent?	N/A

Were the marking schemes/criteria and, where appropriate, model answers, suitable and applied consistently?	Yes/Always

Were the procedures for marking and moderation suitable and applied consistently in line with College policies and regulations?	Yes/Always

Were the grade boundaries for the assessments set at the appropriate level and applied consistency (i.e. the standard required to achieve the threshold mark at each grade boundary)?	Most/Usually
This is difficult to answer given the PTEM scheme, where all the exams are scaled differently, but i'm happy that this was conducted in a fair and consistent way.	

Programme Content Which Has Been Delivered and Assessed by Another Institution:

	Collaborative Modules (modules undertaken at local partner institutions)	Placement Activity (e.g. some or all of an undergraduate study abroad plan)
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Was it clear in advance of the Board that students under consideration had undertaken content away from the College?	N/A	N/A
Were the procedures for incorporating marks obtained by students at another institution clear and consistently applied?	N/A	N/A
Was any such provision discussed at the Board of Examiners, particularly in relation to progression/award decisions, overall value and consistency with regards to the programme(s) of study?	N/A	N/A

Where applicable, please comment on the relevance and integration of placements (provision at a Placement Provider, for example, undergraduate Year Abroad or Year in Industry; placement activity contributing to delivery of a postgraduate project) to the overall programme and their contribution to the programme learning outcomes:

Where applicable, please comment on the relevance and integration of any collaborative modules (modules undertaken at other approved UK HEIs) to the overall programme and their contribution to the programme learning outcomes:

<u>Departmental Response:</u>

Board of Examiners Meeting:

Were you invited to attend the meeting?	Yes/All
Were you able to attend the meeting, either in person or via video-conferencing?	Yes/All
Was the meeting conducted appropriately, in your opinion?	Yes/All
Were you satisfied with the decisions of the Board of Examiners?	Yes/All
Were the arrangements for degree classification appropriate and applied consistently?	Yes/Always

Was consideration of borderline performances conducted fairly and equitably, and in line with College procedures?	Yes/Always
If viva voce of potential borderline candidates were used,	
Were suitable arrangements made for you to conduct viva voce examinations?	N/A
Was the purpose of conducting a viva voce examination and the criteria for selecting candidates for a viva voce clear?	N/A

Were the College procedures governing mitigating circumstances and/or academic misconduct (e.g. plagiarism cases) considered and applied fairly and equitably to all students?	Yes/Always

Departmental Response:

Response to Your Last External Examiner Report:

Did you receive the formal written response to your previous External Examiner report (if applicable)	N/A
Are you satisfied that the issues raised in the previous report have been or are being addressed?	N/A
I don't remember submitting an MSc Board of Examiners report last year, so I can't comment on this.	

Departmental Response:

Overview, Recommendations and Good Practice:

Please outline any examples of good or innovative practice in learning, teaching and assessment you would like to highlight with regards to these programme(s):
The MSc is conducted well, and the projects are always of a high quality.

Please outline any recommendations or suggestions for enhancement you would like to make with regards to these programme(s):

Nothing to add at this stage.

Departmental Response:

Overall Confidence Statements

In my opinion, Imperial College London is maintaining the threshold academic standards set for its awards in accordance with the FHEQ and relevant Subject Benchmarks Statements.	Yes
In my opinion the assessment process measures student achievement rigorously and fairly against the intended learning outcomes of the programme and is conducted in line with the College's policies and regulations.	Yes
In my experience the academic standards and the achievements of students are comparable with those in other degree awarding bodies.	Yes

Name and Position of Departmental Respondent:	
Date:	

External Examiner Report (2021-22 Academic Year)

Name of External Examiner	David Woods
Name of Programme	MSc Statistics

Programme and Module Information (supplied directly or via a link to an online portal):

Did you receive programme handbooks/specifications (including programme learning outcomes)?	Yes/All
Did you receive syllabus or module descriptors including learning outcomes at module level?	Yes/All
Did you receive details of the assessments?	Yes/All
Did you receive sufficient information about the programmes/modules in order to fulfil your role?	Yes/All

Departmental Response:

Programme and Curriculum Design:

Is the content of the degree programme balanced in relation to stated learning outcomes, e.g. the compulsory modules contain the material you would expect?	Yes/Always

Is the programme coherent and up-to-date with the expectations of the subject field?	Yes/Always
Impressive range of modules, all providing a high level and modern education in Statistics.	

Do you consider that the programme design is suitable in relation to the following, where applicable? *relevant subject benchmarks, *Professional Statutory Regulatory Body (PSRB) *Accrediting Body requirements	Yes/Always

Assessment Strategy:

In your opinion, overall, are the methods of assessment (including unseen written papers, essay/dissertations, orals, clinical examinations) suitable in relation to the level of study and the intended learning outcomes?	Yes/Always

Is the assessment load comparable and balanced across modules of the same level?	Yes/Always

Was the overall assessment load for the programme suitable?	Yes/Always

Departmental Response:

Drafting of Assessments:

Did you receive all of the necessary draft assessments for comment/approval?	Yes/All
Were the nature and level of the tasks appropriate?	Yes/All
Were suitable arrangements in place to consider your comments on the draft assessments?	Yes/All
Did you receive feedback on your comments?	Yes/All

Marking and Moderation (of examination scripts, assessed coursework, dissertation/project reports, etc.)

Did you receive a sufficient number of scripts and other assessed work across the full grade profile?	Yes/All
Was the general standard and consistency of marking appropriate?	Yes/All
Was there evidence that assessed work had been moderated internally, either through check marking or second marking?	Yes/All

Was the justification of marks clear on the scripts that you reviewed?	Yes/All

Practical Examinations:

Were satisfactory arrangements made for the conduct of practical examinations?	N/A
Was the general standard and consistency of marking appropriate?	N/A

Oral Examinations:

Were satisfactory arrangements made for the conduct of oral assessments (e.g. presentations, poster presentations, etc...)?	Yes/All
Was the assessment of such work appropriate and consistent?	Yes/All

Were the marking schemes/criteria and, where appropriate, model answers, suitable and applied consistently?	Yes/Always

Were the procedures for marking and moderation suitable and applied consistently in line with College policies and regulations?	Yes/Always

Were the grade boundaries for the assessments set at the appropriate level and applied consistency (i.e. the standard required to achieve the threshold mark at each grade boundary)?	Yes/Always

Programme Content Which Has Been Delivered and Assessed by Another Institution:

	Collaborative Modules (modules undertaken at local partner institutions)	Placement Activity (e.g. some or all of an undergraduate study abroad plan)
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Was it clear in advance of the Board that students under consideration had undertaken content away from the College?	N/A	N/A
Were the procedures for incorporating marks obtained by students at another institution clear and consistently applied?	N/A	N/A
Was any such provision discussed at the Board of Examiners, particularly in relation to progression/award decisions, overall value and consistency with regards to the programme(s) of study?	N/A	N/A

Where applicable, please comment on the relevance and integration of placements (provision at a Placement Provider, for example, undergraduate Year Abroad or Year in Industry; placement activity contributing to delivery of a postgraduate project) to the overall programme and their contribution to the programme learning outcomes:

Where applicable, please comment on the relevance and integration of any collaborative modules (modules undertaken at other approved UK HEIs) to the overall programme and their contribution to the programme learning outcomes:

<u>Departmental Response:</u>

Board of Examiners Meeting:

Were you invited to attend the meeting?	Yes/All
Were you able to attend the meeting, either in person or via video-conferencing?	Yes/All
Was the meeting conducted appropriately, in your opinion?	Yes/All
Were you satisfied with the decisions of the Board of Examiners?	Yes/All
Were the arrangements for degree classification appropriate and applied consistently?	Yes/Always

Was consideration of borderline performances conducted fairly and equitably, and in line with College procedures?	Yes/Always
If viva voce of potential borderline candidates were used,	
Were suitable arrangements made for you to conduct viva voce examinations?	N/A
Was the purpose of conducting a viva voce examination and the criteria for selecting candidates for a viva voce clear?	N/A

Were the College procedures governing mitigating circumstances and/or academic misconduct (e.g. plagiarism cases) considered and applied fairly and equitably to all students?	Yes/Always

Departmental Response:

Response to Your Last External Examiner Report:

Did you receive the formal written response to your previous External Examiner report (if applicable)	Yes/All
Are you satisfied that the issues raised in the previous report have been or are being addressed?	Yes/All

Departmental Response:

Overview, Recommendations and Good Practice:

Please outline any examples of good or innovative practice in learning, teaching and assessment you would like to highlight with regards to these programme(s):
In my opinion, the move back to *open-book* in-person examinations for many modules is pragmatic and well aligned with the learning objectives of the programme. I think the open book nature of the examinations is important, and encourages assessment of understanding and interpretation.

Please outline any recommendations or suggestions for enhancement you would like to make with regards to these programme(s):

As discussed in the exam board meeting in July, I would encourage the Department to think carefully about the assessment criteria for the dissertations, where marks are substantially higher than for the taught component. This disparity may not be an issue, and there is no doubt that many truly excellent projects are produced. But some consideration/monitoring is necessary given the importance of the dissertation marks in the decision on overall degree status (where it is essentially counted twice - once in the overall average and then again using a threshold when deciding on distinction/merit/pass). This "double weighting" of the dissertation may actually be a desirable feature (this is an MSc programme, after all) but the lack of a similar threshold on the average from the taught component can result in a student receiving a distinction with an unexpected marks profile.

Departmental Response:

Final Exit Report:

Please provide an overview of your term of office, including:

- *any changes in standards of student performance over time
- *major developments in the provision during your tenure
- *the implementation of any recommendations for enhancement
- * any other matters you consider appropriate

Departmental Response:

Overall Confidence Statements

In my opinion, Imperial College London is maintaining the threshold academic standards set for its awards in accordance with the FHEQ and relevant Subject Benchmarks Statements.

Yes

In my opinion the assessment process measures student achievement rigorously and fairly against the intended learning outcomes of the programme and is conducted in line with the College's policies and regulations.

Yes

In my experience the academic standards and the achievements of students are comparable with those in other degree awarding bodies.

Yes

Name and Position of Departmental Respondent:

Date:

