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PUBLISHED BY AUTHORITY
NOTICES

Calendar

14 June, Friday. Full Term ends.
16 June, Sunday. Trinity Sunday. Scarlet day.
19 June, Wednesday. Congregation of the Regent House at 2.45 p.m. (Honorary Degrees).
25 June, Tuesday. Easter Term ends.
26 June, Wednesday. Congregation of the Regent House at 10 a.m. (General Admission). Scarlet day.
27 June, Thursday. Congregation of the Regent House at 10 a.m. (General Admission). Scarlet day.
28 June, Friday. Congregation of the Regent House at 10 a.m. (General Admission). Scarlet day.
29 June, Saturday. Congregation of the Regent House at 10 a.m. (General Admission). Scarlet day.

Additional Discussion on Tuesday, 2 July 2019

The Vice-Chancellor has approved an amendment to the schedule of Discussions in 2018–19 and invites those qualified under the regulations for Discussions (Statutes and Ordinances, p. 105) to attend an additional Discussion in the Senate-House on Tuesday, 2 July 2019 at 2 p.m., for the discussion of:

1. First-stage Report of the Council, dated 12 June 2019, on the construction of the National Centre for Propulsion and Power and re-development of the Whittle Laboratory (p. 684).

Further information on Discussions, including details on format and attendance, is provided at https://www.governance.cam.ac.uk/governance/decision-making/discussions/.

Election to the Board of Scrutiny

7 June 2019

The Vice-Chancellor announces that he has received the following nominations, in accordance with Statute A VII 3, for election to the Board of Scrutiny in class (c)(ii) (members of the Regent House), and that it has been certified to him that the candidates have consented to be so nominated:

<table>
<thead>
<tr>
<th>Candidate</th>
<th>Nominated by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms Edna Helen Murphy, ED</td>
<td>Mr G. Chesterman, ED, and Ms L. M. Thompson, LC</td>
</tr>
<tr>
<td>Mr Ian Nicholas Molynieux Wright, PET</td>
<td>Mr T. N. Milner, DAR, and Dr S. M. Murk-Jansen, PET</td>
</tr>
</tbody>
</table>

No other candidates having been nominated, the Vice-Chancellor declares that Ms Murphy and Mr Wright are elected to the Board of Scrutiny in class (c)(ii) for four years from 1 October 2019. Their personal statements are available at https://www.governance.cam.ac.uk/ballots/voting/Pages/BoS-ET2019.aspx (Raven only).

The Council shall be asked whether it wishes to appoint a member to the remaining vacancies, one in class (c)(i) and one in class (c)(ii), or to hold another election, in accordance with Regulation 3 of the regulations for the election of members of the Board (Statutes and Ordinances, p. 114).

Election to the Nominating Committee for External Members of the Council

7 June 2019

The Vice-Chancellor announces that he has received no nominations for election to the Nominating Committee for External Members of the Council in class (d).

A further election will be held to the same timetable as that already announced for the election of a member of the Council in class (a) (Reporter, 6550, 2018–19, p. 648), with a deadline for nominations of 12 noon on Friday, 21 June 2019.
**Dates of Congregations, 2019–20 and 2020–21**

The Vice-Chancellor gives notice, in accordance with Special Ordinance A (i) 2, and the regulations for General Admission to Degrees, that Congregations will be held on the following days in the academic years 2019–20 and 2020–21.

**CONGREGATIONS OF THE REGENT HOUSE**
(on Saturdays unless otherwise stated)

### 2019–20:

<table>
<thead>
<tr>
<th>Michaelmas Term 2019</th>
<th>Lent Term 2020</th>
<th>Easter Term 2020</th>
<th>Long Vacation 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Term</strong>: 8 October – 6 December</td>
<td><strong>Full Term</strong>: 14 January – 13 March</td>
<td><strong>Full Term</strong>: 21 April – 12 June</td>
<td>17 July (Friday), 10 a.m.</td>
</tr>
<tr>
<td>1 October, <strong>11 a.m.</strong></td>
<td>25 January, <strong>2 p.m.</strong></td>
<td>25 April, <strong>11 a.m.</strong></td>
<td>18 July, <strong>10 a.m.</strong></td>
</tr>
<tr>
<td>26 October, <strong>11 a.m.</strong></td>
<td>22 February, <strong>2 p.m.</strong></td>
<td>16 May, <strong>10 a.m.</strong></td>
<td>24 June (Wednesday), <strong>10 a.m.</strong></td>
</tr>
<tr>
<td>30 November, <strong>2 p.m.</strong></td>
<td>21 March, <strong>11 a.m.</strong></td>
<td>17 June (Wednesday), <strong>2.45 p.m.</strong></td>
<td>25 June (Thursday), <strong>10 a.m.</strong></td>
</tr>
<tr>
<td></td>
<td>28 March, <strong>11 a.m.</strong></td>
<td>(Honorary Degrees)</td>
<td>26 June (Friday), <strong>10 a.m.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>27 June, <strong>10 a.m.</strong></td>
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</tbody>
</table>

### 2020–21:

<table>
<thead>
<tr>
<th>Michaelmas Term 2020</th>
<th>Lent Term 2021</th>
<th>Easter Term 2021</th>
<th>Long Vacation 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Term</strong>: 6 October – 4 December</td>
<td><strong>Full Term</strong>: 19 January – 19 March</td>
<td><strong>Full Term</strong>: 27 April – 18 June</td>
<td>10 July (Friday), <strong>10 a.m.</strong></td>
</tr>
<tr>
<td>1 October, <strong>9,30 a.m.</strong></td>
<td>30 January, <strong>2 p.m.</strong></td>
<td>1 May, <strong>11 a.m.</strong></td>
<td>23 July (Friday), <strong>10 a.m.</strong></td>
</tr>
<tr>
<td>24 October, <strong>11 a.m.</strong></td>
<td>27 February, <strong>2 p.m.</strong></td>
<td>22 May, <strong>10 a.m.</strong></td>
<td>24 July, <strong>10 a.m.</strong></td>
</tr>
<tr>
<td>28 November, <strong>2 p.m.</strong></td>
<td>27 March, <strong>11 a.m.</strong></td>
<td>23 June (Wednesday), <strong>2.45 p.m.</strong></td>
<td>30 June (Wednesday), <strong>10 a.m.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Honorary Degrees)</td>
<td>1 July (Thursday), <strong>10 a.m.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 July (Friday), <strong>10 a.m.</strong></td>
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<td></td>
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<td></td>
<td>3 July, <strong>10 a.m.</strong></td>
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</tbody>
</table>

1 Vice-Chancellor’s Address followed by the Congregation for the election and admission of the Proctors.


**Procedures to Determine Fitness to Practise of Preclinical and Clinical Medical Students**

The University’s student fitness to practise procedures will be subject to a formal review in 2019–20. However, following informal review, the Council, on the recommendation of the General Board, is proposing an amendment to the Procedures to Determine Fitness to Practise of Preclinical and Clinical Medical Students, to take immediate effect (Grace 3, p. 691).

The amendment would explicitly permit a preliminary consideration of a reported cause for concern, prior to it being referred to a Fitness to Practise Committee. This amendment would clarify the process that is undertaken following receipt of a cause for concern, ensuring transparency to all parties.

**Report of the General Board on arrangements for the implementation of the Academic Career Pathways scheme: Notice in response to Discussion remarks**

The Council has received the remarks made at the Discussion on 28 May 2019 (Reporter, 6550, 2019–20, p. 655) on the above Report (Reporter, 6547, 2018–19, p. 562). It has consulted with the General Board in the preparation of this response.

The Council notes the many comments in support of the introduction of the new Academic Career Pathways (ACP) scheme to replace the current Senior Academic Promotions (SAP) process, including from Professor Ferran as the sponsor of the changes, several Pro-Vice-Chancellors, some members of the HR Committee and Heads of School and Institutions who set out the benefits they believe it would bring, including recognition within the scheme’s criteria for contributions made to a much wider range of activities than those captured currently in the SAP process. The Council also notes the remarks made by Dr Eglen in support of the new ACP scheme committing to the principles of the Declaration of Research Assessment (DORA) and by Dr Coxon who supports the addition of researcher development to the teaching criterion, including ensuring ‘that early-career researchers receive excellent opportunities to develop their potential and prepare them for future success’. Dr Mesquita da Costa’s positive comments on work under way to review the Senior Research Promotions (SRP) scheme to bring it in line with the ACP scheme, including her hope that its guidelines can be adapted to use in the new scheme, are noted and have been passed to the Working Group taking forward this review.
The Council notes that concerns were also raised on some aspects of the promotion and probationary arrangements set out in the Report. In response to remarks about ensuring that all those who meet the standard for promotion are promoted, the Council comments, as stated in the Report and by Professor Ferran in her remarks, that steps will continue to be taken so that there is appropriate budgetary provision for deserving candidates to receive recognition and reward. The General Board can confirm, in response to Dr Morgan’s query, that no candidate recommended for promotion by the Vice-Chancellor’s Committee in either the 2018 exercise or this year was denied their promotion because of a financial constraint. Dr du Bois-Pedain raises concerns that the new scheme seems to increase the expectations required for promotion to a senior academic post and compares it unfavourably with the arrangements at Oxford and with other leading universities in terms of the time taken to achieve promotion. Dr Morgan also comments unfavourably on the time taken to achieve promotion at Cambridge. The Council does not consider it appropriate to comment on the promotions arrangements of other universities, which operate differently. However, the development of an online application system to support the ACP scheme will lead to enhanced reporting capabilities which will facilitate better data analysis, so that these aspects can be monitored and compared with available external benchmarking data. This system will also facilitate the provision of the enhanced statistical analysis of equality and diversity data, as requested by Dr Sliwa.

The Council also notes concerns raised by Dr Sliwa about whether the ACP scheme will have a positive impact on the gender pay gap. The Council agrees that reducing the gender pay gap is of critical importance and notes remarks from Professor Ferran that the reforms proposed by the ACP scheme are designed to have a positive impact, and that their development is in line with work published by the Government Equalities Office that identifies improving promotion processes, creating an inclusive culture and supporting women’s career development as actions that employers can take to help close the gap. However, the Council also notes Professor Ferran’s comment that launching the ACP scheme will not do so on its own and that she is keen to work with all interested parties to maximise its practical impact alongside other complementary initiatives.

The Council notes Dr Sliwa’s concerns about equality and diversity (E&D) oversight of the ACP proposals, including consideration by the relevant committees relevant to consultation, and of E&D oversight of local indicators of excellence. The Council confirms that the Equality and Diversity section was involved at all stages of the development of the ACP scheme and details were also passed to relevant E&D committees at appropriate points in its development. The Council notes that one of the E&D initiatives being taken forward is the development of Career Development workshops which should help address Dr Sliwa’s concern about women applying later in their careers than men. The Council recommends that the close involvement of the E&D section and consideration of equality and diversity matters continues, including the concern raised by Dr Sliwa about the possible impact on women and BAME staff of terms such as ‘collegiality’ set out under the service criterion in the scheme. The Council reiterates that the University’s core value of freedom of thought and expression is central to career progression at Cambridge. The Council expects local indicators of excellence within each School to be reviewed from an E&D perspective before adoption and this requirement to be included in the detailed promotions guidance being developed.

Dr Sucheta’s remarks urging a redefinition of the ACP to incorporate a broad and fluid portfolio of excellence indicators are noted. The Council comments that the current proposals provide for a wide range of examples of indicators of excellence and allow limited flexibility in adjusting the weighting of the promotion criteria; this scoring flexibility will be kept under review and if it works well expanded in the evolution of the ACP scheme. The Council agrees with Professor Leyser’s remarks that there are tensions between recognising and rewarding diverse contributions and providing specific and transparent criteria for assessment, and that while assessment is evidence-based there will always be a significant subjective element, which is why a well-trained and diverse committee is needed to carry out this assessment in a fair and robust manner. The Council shares Professor Leyser’s view that more could be done in achieving the sort of holistic assessment that Dr Sucheta is also advocating, but that there is a need to bed in changes before further evolution.

The Council has been informed by the General Board that feedback received since the publication of the Report has indicated that Schools and Institutions have some reservations about committing to launch the scheme at the start of 2019–20. The General Board has therefore agreed to the implementation of the recommendations in the Report being delayed until the start of 2020–21. The Council agrees with this decision on the basis that adopting the recommendations of the Report and delaying implementation will give potential applicants and institutions time to prepare for the new scheme and provide an opportunity for the probation and promotion committees to familiarise themselves with the new framework.

The Council notes several comments about the proposed probationary scheme for University Lecturers. These include concerns expressed about the appropriateness of including references to an ‘upward trajectory’ in the probation approval criteria, and the negative impact on current probationers of introducing these changes retrospectively, and that in making the probationary requirements more specific, the scheme would move towards the more rigorous tenure track system operated in the United States. As noted in Professor Ferran’s remarks, the reasons for including probation within the scope of the ACP scheme was to achieve an integrated career-long progression framework, where probationers could map out their career trajectory, and to clarify the role of the Heads of Institution and others in supporting staff to achieve their full potential. It would also ensure that recognition of contextual factors, already embedded in the SAP process and to be carried forward into ACP, also apply in the probation context. The Council notes this has particular significance because academic probation often coincides with periods of maternity and/or shared parental or other family leave, which was also noted as a concern in a few remarks made during the Discussion. The Council agrees with Professor Ferran’s statement that the University recruits outstanding academics that it wants to keep, will support these valued colleagues to reach the high standard that Cambridge sets, and will publicly recognise their success in doing so, in line with the University’s values, and there is no other unstated reason for setting out probationary requirements.

However, in response to the concerns about reference to an ‘upward trajectory’, the Council agrees with the General Board’s recommendation that these references (in Section 2 of Annex 2 – Academic Probation and Career Progression up to University Senior Lecturer; and paragraph 4.5.1 of Annex 4 – Probationary arrangements for academic offices) be removed to allow for further discussion. The Council also notes that there is a review being carried out of probationary arrangements in the University, which may propose further amendments to the probationary criteria which would, if formally approved, supersede those set out in the Annexes to the Report.
Professor Evans’s positive comments on the Report are noted. Her concern about the discretion given to the General Board to make changes to the ACP scheme processes it considers necessary, provided that they are in line with Key Principles and made in the light of experience, for the effective running of future scheme rounds, is also noted. The Council observes, as noted by Professor Evans, that the development of the ACP will be an iterative process, evolving over the coming years to ensure it meets the needs of the University and staff. The Council confirms that substantive changes to the scheme, such as changes to the probationary arrangements mentioned previously and the development of a distinct teaching strand referred to in the Report, will be taken through the usual formal channels.

The Council is submitting a Grace (Grace 1, p. 690) for the approval of the recommendations of this Report, as amended by this Notice to revise the date of effect of the Report’s recommendations from 2019–20 to 2020–21 and to remove the references in its Annexes to an ‘upward trajectory’ in relation to probationary arrangements.

### USS update: Current status of the 2018 valuation and next steps

The 2018 valuation of the Universities Superannuation Scheme (USS) has projected a deficit for the scheme. This is smaller than that projected by the 2017 valuation, but would still require some increase in member and employer contributions to maintain the current schedule of benefits. Various options for these contribution increases are currently being considered by USS in conjunction with employers (represented by Universities UK; UUK) and scheme members (represented by the University and College Union). In response to a recent UUK consultation on three options presented by USS, the University of Cambridge, along with the majority of other respondents, indicated its preference for Option 3, which entails a combined contribution rate of 30.7% and a new valuation in 2020. The 2020 valuation could take into account any revisions to the USS valuation methodology proposed by the Joint Expert Panel, which is currently undertaking a second phase of investigations.

The timetable for implementing any contribution changes depends on how rapidly the various parties reach agreement. In addition, any changes to benefits and/or contributions need to be agreed by the Pensions Regulator. The University will keep USS members informed of developments via the For Staff website, the USS bulletin, and the Reporter; and a more comprehensive update on the 2018 valuation is available online at https://www.staff.admin.cam.ac.uk/general-news/an-update-on-the-2018-valuation-of-uss

### Open information meeting

An open information meeting for members of the USS will be held at 12.15 p.m. on Thursday, 27 June 2019 in the Babbage Lecture Theatre, New Museums Site; for further details and registration see https://www.eventbrite.co.uk/e/open-meeting-for-members-of-uss-june-2019-tickets-62579885121.

1 Available at https://www.staff.admin.cam.ac.uk/ and https://www.staff.admin.cam.ac.uk/uss-bulletin/ respectively.

### Vacancies, Appointments, etc.

#### Vacancies in the University

A full list of current vacancies can be found at http://www.jobs.cam.ac.uk.

**University Lecturer (Honorary Consultant) in Renal Medicine in the Department of Medicine**; tenure: from 1 November 2019 or as soon as possible thereafter; salary: £77,913–£105,042; closing date: 7 July 2019; further details: http://www.jobs.cam.ac.uk/job/21826; quote reference: RC19405

**Clinical Lecturer in Child and Adolescent Psychiatry in the Department of Psychiatry (fixed-term)**; salary: £33,127–£58,593; tenure: four years, to commence as soon as possible; closing date: 8 July 2019; further details: http://www.jobs.cam.ac.uk/job/21481; quote reference: RN19094

**Clinical Lecturer in Histopathology in the Department of Pathology (fixed-term)**; salary: £33,127–£58,593; tenure: four years; closing date: 7 July 2019; further details: http://www.jobs.cam.ac.uk/job/21900; quote reference: PK19475

**Centre and Course Manager in the Department of Engineering (fixed-term)** (for the EPSRC Centre of Doctoral Training in Future Infrastructure and Built Environment: Resilience in a Changing World (FIBE2 CDT)); salary: £40,792–£51,630; tenure: fixed term for three years in the first instance, from 1 September 2019 or as soon as possible thereafter; closing date: 9 July 2019; further details: http://www.jobs.cam.ac.uk/job/21818; quote reference: NM19397

The University values diversity and is committed to equality of opportunity.

The University has a responsibility to ensure that all employees are eligible to live and work in the UK.
REGULATIONS FOR EXAMINATIONS

Asian and Middle Eastern Studies Tripos
(Statutes and Ordinances, p. 281)
With effect from 1 October 2019
The General Board has approved the following amendments to the Regulations and the Supplementary Regulations for
the Asian and Middle Eastern Studies Tripos, to reflect the changes made to Papers B14 and C8 of the Theology, Religion

Part Ib
Regulation 18.
X.4. Life, thought and worship of modern Judaism (Paper B14 of the Theology, Religion, and Philosophy of Religion Tripos)
By amending the title and description to read as follows:
X.4. Modern Judaism: thought, culture and history
This paper will be concerned with the thought, culture and history of modern Judaism. The Faculty Board may from
time to time prescribe texts for special study.

SUPPLEMENTARY REGULATIONS
Part II
X.9. Judaism II (Paper C8 of the Theology, Religion and Philosophy of Religion Tripos)
By amending the title and description to read as follows:
X.9. The Jewish tradition and Christianity: From antiquity to modernity
This paper will consider the relationship of the Jewish tradition to Christianity from antiquity to modernity. The
Faculty Board may from time to time prescribe subjects and texts for special study.
It is well known that Christianity evolved in intimate discussion with Judaism, yet how far does this apply vice
versa? The paper will consider ways in which the mainstream of the Jewish tradition, from antiquity to the modern
period, incorporated and was formed by responses to the theological, social and political challenges generated by
interactions with Christianity.

Economics Tripos, Part I
(Statutes and Ordinances, p. 304)
With immediate effect
The General Board, on the recommendation of the Faculty Board of Economics, has approved the following correction
to Part I of the regulations for the Economics Tripos, to reflect current practice (see Reporter, 6490, 2017–18, p. 289).

Part I
Regulation 14.
By inserting the following paragraph after the list of papers specified in Regulation 14:
Each paper shall be set for three hours, except for Paper 5 which shall consist of a written paper of two
hours’ duration and the submission of project work undertaken by the candidate; details of the project work
required and the arrangements for its submission shall be prescribed from time to time by the Faculty Board.

English Tripos, Preliminary Examination and Tripos Regulations
(Statutes and Ordinances, pp. 262 and 326)
With effect from 1 October 2019
The General Board, on the recommendation of the Faculty Board of English, has approved the following amendments to
the special regulations for the Preliminary Examination for the English Tripos and the regulations for the English Tripos.

Preliminary Examination
Part II
Regulation 6.
By reinstating Paper 21 by removing the footnote at the end of the first sentence.
ENGLISH TRIPOS

Regulation 14.

By amending the final sentence of the regulation, including removing the reference to Paper 3, so as to read as follows:

Every paper shall be set for three hours except Paper 1, which shall be set for three-and-a-half hours, and Papers 9A and 9B, which shall be set for three hours plus an additional fifteen minutes’ reading time.

Regulation 18.

By amending and retiling Papers 9, 11, 17 and 18 in Group B to read as follows:

Paper 11. Prose forms, 1936–56
Paper 17. Lyric
Paper 18. Visual culture

And by reinstating Paper 17 by removing the footnote for its suspension.

And by removing Papers 41A and 41B and renumbering the subsequent papers (so papers currently numbered 42A and 42B become 41A and 41B, and papers currently numbered 43A and 43B become 42A and 42B).

And by amending the wording ‘Papers 26 to 43’ to read ‘Papers 26 to 42’ in the second sentence of the final paragraph.

And by removing the reference to Paper 21 in the first sentence of the final paragraph so the sentence reads as follows:

Every paper shall be set for three hours except Paper 1, which shall be set for three-and-a-half-hours.

Regulation 19.

By amending the references ‘to 43’ in the papers ranges to ‘to 42’ in sub-paragraphs (b)(i), (b)(ii), (c)(i) and (c)(viii).

And by deleting the text ‘, or both Papers 42A and 42B’ from the end of sub-paragraph (c)(ii).

SUPPLEMENTARY REGULATIONS

By amending the titles and descriptions of Papers 9 and 11 to read as follows:

The paper will not be divided into sections. In the paper as a whole, candidates must show substantial knowledge of writing in English in the period 1740–1824

Paper 11. Prose forms, 1936–56
This paper will be divided into two sections. Section A will consist of passages for comment; Section B will consist of essay questions.

And by adding the following text at the end of the description for Paper 13. Postcolonial and related literatures:

The primary scope of the paper is literature in English outside Britain and the United States of America. In relation to matters of Empire, reference to British, American, foreign language texts and the literatures of migrancy and immigration are allowed. Answering on texts in translation is permitted.

And by amending the titles of Papers 17 and 18 as follows:

Paper 17. Lyric
Paper 18. Visual culture

Master of Education

(Statutes and Ordinances, p. 462)

With effect from 1 October 2020

The General Board, on the recommendation of the Faculty Board of Education, has approved the amendment of the regulations for the degree of Master of Education so as to remove Educational research and add Transforming practice to the list of pathways available for study.

Regulation 11.

By removing Educational research from the list of pathways specified at the end of Regulation 11.

By adding Transforming practice to the list of pathways specified at the end of Regulation 11.
**Education for the M.Phil. Degree**

*(Statutes and Ordinances, p. 524)*

**With effect from 1 October 2020**

The General Board, on the recommendation of the Faculty Board of Education, has approved the amendment of the special regulations for the examination in Education for the degree of Master of Philosophy so as to remove *Educational research* and add *Knowledge, power and politics* to the list of pathways available for study.

**PATHWAYS.**

By removing *Educational research* from the list of pathways specified at the end of the regulations.

By adding *Knowledge, power and politics* to the list of pathways specified at the end of the regulations.

**Diplomas and Certificates open to non-members of the University**

*(Statutes and Ordinances, p. 592)*

**With effect from 1 October 2019**

The General Board, on the recommendation of the Strategic Committee of the Institute of Continuing Education, has agreed to rescind the Certificate in Astronomy and the Diploma in Astronomy, and has therefore approved their removal from the Schedule to the regulations for Diplomas and Certificates open to non-members of the University.

**Diplomas**

*Institute of Continuing Education*

By removing the Diploma in Astronomy.

**Certificates**

*Institute of Continuing Education*

By removing the Certificate in Astronomy.

**NOTICES BY FACULTY BOARDS, ETC.**

**Asian and Middle Eastern Studies Tripos, Parts I and II, 2019–20**

The Faculty Board of Asian and Middle Eastern Studies gives notice of the following options to be offered under Regulation 8 for Part Ib and Part II of the Asian and Middle Eastern Studies Tripos in 2019–20. The Faculty reserves the right to withdraw any course that is undersubscribed. Where specific classes are not available students will be appropriately mentored in finding alternatives.

Unless otherwise specified, all papers consist of a three-hour examination.

**Part Ib**

**MES.21. Elementary Hindi language**

This paper will consist of two parts: a written paper (70 marks) and an oral examination (30 marks). The written paper will consist of two sections: Section A will contain a text comprehension exercise in Hindi (20 marks) and a ‘fill in the blanks’ exercise to test students’ grammar (20 marks). Section B will contain a translation exercise from Hindi to English (15 marks), and a translation exercise from English to Hindi (15 marks).

The oral examination will consist of three sections. All timings are approximate and the oral examinations are recorded:

(a) listening and comprehension test (10 marks);
(b) role-play (10 marks);
(c) discussion on a given topic (10 marks).

Ten minutes in total will be given for Sections (b) and (c).

**Part II**

**Chinese**

**C.13. Literary Chinese 3**

This paper will contain three sections, all of which must be attempted. Section 1 will contain one or more passages from seen texts in literary Chinese for translation into English. Candidates may be asked to comment on the texts in question. Section 2 will contain unseen texts for translation into English. Section 3 is a comprehensive reading exercise. Candidates will be asked to answer questions, in English, on one or more unseen texts. Candidates will be allowed to use copies of Chinese–Chinese dictionaries provided.
C.15. The Chinese tradition: Chinese thought
This paper will consist of two passages in literary Chinese for translation and comment, and six essay questions, of which two must be attempted. Candidates will be allowed to use copies of Chinese–Chinese dictionaries provided.

C.16. Early and imperial China
This paper will consist of a passage in literary Chinese and another one in modern Chinese for translation and comment, and six essay questions, of which two must be attempted. Candidates will be allowed to use copies of Chinese–Chinese dictionaries provided.

C.17. Modern Chinese literature
This paper will consist of two passages in Chinese for translation and comment, and six essay questions, of which two must be attempted. Candidates will be allowed to use copies of Chinese–Chinese dictionaries provided.

C.18. China in a global WWII
This paper will consist of ten questions of which candidates will be required to answer three.

C.19. Chinese linguistics
This paper will consist of two passages in Chinese for translation into English, and six essay questions, of which two must be attempted. Candidates will be allowed to use copies of Chinese–Chinese dictionaries provided.

C.20. Contemporary Chinese society
This paper is divided into four parts, all of which must be attempted. Part 1 and Part 2 (each carrying 15 marks) will each consist of a Chinese-language passage. Candidates will be asked to summarise the passage briefly and answer a commentary question, both in English. Part 3 and Part 4 (each carrying 35 marks) will each consist of five essay questions, of which one question must be answered. Candidates will be allowed to use copies of Chinese–Chinese dictionaries provided.

C.21. China in the international order (Paper POL21 of the Human, Social and Political Sciences Tripos)
Candidates should refer to the Human, Social and Political Sciences Tripos for information on the form and conduct of this examination.

Japanese
J.14. Premodern texts
The coursework that constitutes this paper’s assessment will consist of two annotated translations of premodern Japanese texts, of between 3,000 and 4,500 words each in English, including notations but excluding bibliography. Two hard copies and one electronic copy (pdf) of each translation shall be submitted to the Programmes Administrator in the Faculty Office so as to arrive by the division of Full Easter Term.

J.15. Modern Japanese cultural history
The coursework that constitutes this paper’s assessment will consist of one research essay, of between 6,000 and 7,500 words, including footnotes and excluding bibliography. Each student will develop the topic of the essay in consultation with the instructor. Two hard copies and one electronic copy (pdf) of the research essay shall be submitted to the Programmes Administrator in the Faculty Office so as to arrive not later than the division of Full Easter Term.

J.16. Topics in pre-modern Japanese history
The coursework that constitutes this paper’s assessment consists of one research essay of between 6,000 and 7,500 words, including footnotes and excluding bibliography. Each student will develop the topic of the essay in consultation with the instructor. Two hard copies and one electronic copy (pdf) of the research essay shall be submitted to the Programmes Administrator in the Faculty Office so as to arrive not later than the division of Full Easter Term.

J.19. Contemporary Japanese society
The coursework that constitutes this paper’s assessment consists of one research essay, of between 6,000 and 7,500 words, including footnotes and excluding bibliography. Each student will develop the topic of the essay in consultation with the instructor. Two hard copies of the research essay shall be submitted to the Programmes Administrator in the Faculty Office so as to arrive not later than the division of Full Easter Term.

EAS.2. The East Asian region
This paper will contain ten essay questions, of which candidates will be required to attempt three.

K.1. Modern Korean reading and translation
This paper tests candidates’ knowledge of Korean grammar and comprehension of elementary level Korean texts in two sections: Sections A and B. Candidates’ grammatical knowledge is tested in Section A and their comprehension in Section B, where they are required to translate Korean reading passages into English.
Middle Eastern Studies

MES.37. History of the pre-modern Middle East
This paper will consist of eight essay questions, of which candidates will be required to answer three. All questions will carry equal marks.

MES.38. History of the modern Middle East
This paper will consist of eight essay questions, of which candidates will be required to answer three. All questions will carry equal marks.

MES.39. Special subject in the pre-modern Middle East
This paper will consist of nine questions. Question 1 will be a series of texts and images for analysis and discussion, of which candidates must choose three. Questions 2–9 will be essay questions. Candidates will be required to answer Question 1 and two questions chosen from Questions 2–9. All questions will carry equal marks.

MES.40. Special subject in the contemporary Middle East
This paper is assessed by a research essay of between 6,000 and 7,500 words, including footnotes and excluding bibliography. Each student will develop the topic of the essay in consultation with the instructor. A one-page topic and paper outline will be due during the first class session of Lent Term. Two hard copies and one electronic copy (pdf) of the project shall be submitted to the Programmes Administrator in the Faculty Office so as to arrive not later than the fourth Friday of Full Easter Term.

MES.41. Comparative semitic linguistics
This paper will consist of eight essay questions, of which candidates will be expected to answer three. All questions will carry equal marks.

MES.42. Elementary Sanskrit
This paper will consist of four questions. Questions 1 to 3 will consist of a seen passage for translation into English (20 marks each) and grammar questions (5 marks each) on some of the forms found in the selected passage. Question 4 will consist of an unseen translation from Sanskrit into English for which a glossary will be provided (25 marks). All questions must be answered.

MES.43. Intermediate Hindi language
This paper will consist of two parts: a written paper (70 marks) and an oral exam (30 marks). The written paper will consist of two sections: Section A will contain two passages in Hindi to be translated into English (35 marks). Section B will contain two passages in English to be translated into Hindi (35 marks).

The oral examination will consist of three sections. All timings are approximate and the oral examinations are recorded:
(a) listening and comprehension test (10 marks);
(b) role-play (10 marks);
(c) discussion on a given topic (10 marks).
Ten minutes in total will be given for Sections (b) and (c).

X.9. The Jewish tradition and Christianity: from antiquity to modernity (Paper C8 of the Theology, Religion and Philosophy of Religion Tripos)
Candidates should refer to the Theology, Religion and Philosophy of Religion Tripos for information on the form and conduct of this examination.

X.10. Islam II (Paper C9 of the Theology, Religion and Philosophy of Religion Tripos)
Candidates should refer to the Theology, Religion and Philosophy of Religion Tripos for information on the form and conduct of this examination.

X.11. Judaism and western philosophy (Paper D2(c) of the Theology, Religion and Philosophy of Religion Tripos)
Candidates should refer to the Theology, Religion and Philosophy of Religion Tripos for information on the form and conduct of this examination.

X.15. The politics of the Middle East (Paper POL12 of the Human, Social and Political Sciences Tripos)
Candidates should refer to the Human, Social and Political Sciences Tripos for information on the form and conduct of this examination.
Chemical Engineering Tripos, Part IIb, 2019–20

The Chemical Engineering and Biotechnology Syndicate gives notice that the modules available for study in the academic year 2019–20 will be as follows:

Topics in Group A and Group D are compulsory for all candidates. The regulations specify that each candidate takes a total of six modules from Groups B and C. The Chemical Engineering and Biotechnology Syndicate imposes the restriction that at least two of these modules should be chosen from Group B, and at least two should be chosen from Group C. Further, at least two of the six modules chosen from Groups B and C should be assessed principally or entirely by written examination.

<table>
<thead>
<tr>
<th>Group</th>
<th>Number and title of module</th>
<th>Mode of assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A1: Compulsory topics</td>
<td>Examination</td>
</tr>
<tr>
<td></td>
<td>A2: Chemical product design</td>
<td>Coursework</td>
</tr>
<tr>
<td>B</td>
<td>B1: Advanced transport processes</td>
<td>Examination</td>
</tr>
<tr>
<td></td>
<td>B2: Electrochemical engineering</td>
<td>Examination</td>
</tr>
<tr>
<td></td>
<td>B3: Pharmaceutical engineering</td>
<td>Examination</td>
</tr>
<tr>
<td></td>
<td>B4: Rheology and processing</td>
<td>Examination</td>
</tr>
<tr>
<td></td>
<td>B5: Computational fluid dynamics</td>
<td>Coursework</td>
</tr>
<tr>
<td></td>
<td>B6: Fluid mechanics and the environment</td>
<td>Examination</td>
</tr>
<tr>
<td>C</td>
<td>C1: Optical microscopy</td>
<td>Examination</td>
</tr>
<tr>
<td></td>
<td>C2: Optimisation</td>
<td>Examination</td>
</tr>
<tr>
<td></td>
<td>C3: Healthcare biotechnology</td>
<td>Coursework</td>
</tr>
<tr>
<td></td>
<td>C4: Entrepreneurship</td>
<td>Coursework</td>
</tr>
<tr>
<td></td>
<td>C5: Foreign language</td>
<td>Coursework</td>
</tr>
<tr>
<td></td>
<td>C6: Biosensors and bioelectronics</td>
<td>Coursework</td>
</tr>
<tr>
<td></td>
<td>C7: Bionanotechnology</td>
<td>Examination and coursework</td>
</tr>
<tr>
<td></td>
<td>C8: Biophysics</td>
<td>Examination</td>
</tr>
<tr>
<td>D</td>
<td>Research project</td>
<td></td>
</tr>
</tbody>
</table>

Engineering Tripos, Parts IIa and IIb, 2019–20: Modules

Part IIa: Modules

The Faculty Board of Engineering gives notice that the modules prescribed for the examinations to be held in 2020, and the mode of examination for each module, will be as listed below. Candidates must offer ten modules for examination, of which no more than two may be management modules. Candidates may offer only one module from any one of the sets which are published on the Department’s website at http://teaching19-20.eng.cam.ac.uk/content/part-iiia-modules-sets-2019-20.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Title</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A: Energy, fluid mechanics and turbomachinery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3A1</td>
<td>Fluid mechanics I</td>
<td>Examination</td>
</tr>
<tr>
<td>3A3</td>
<td>Fluid mechanics II</td>
<td>Examination</td>
</tr>
<tr>
<td>3A5</td>
<td>Thermodynamics and power generation</td>
<td>Examination</td>
</tr>
<tr>
<td>3A6</td>
<td>Heat and mass transfer</td>
<td>Examination</td>
</tr>
<tr>
<td>Group B: Electrical engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3B1</td>
<td>Radio frequency electronics</td>
<td>Examination</td>
</tr>
<tr>
<td>3B2</td>
<td>Integrated digital electronics</td>
<td>Examination</td>
</tr>
<tr>
<td>3B3</td>
<td>Switch-mode electronics</td>
<td>Examination</td>
</tr>
<tr>
<td>3B4</td>
<td>Electric drive systems</td>
<td>Examination</td>
</tr>
<tr>
<td>3B5</td>
<td>Semiconductor engineering</td>
<td>Examination</td>
</tr>
<tr>
<td>3B6</td>
<td>Photonic technology</td>
<td>Examination</td>
</tr>
<tr>
<td>Group C: Mechanics, materials and design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3C1/3P1</td>
<td>Materials processing and design (engineering)</td>
<td>Examination</td>
</tr>
<tr>
<td>3C5</td>
<td>Dynamics</td>
<td>Examination</td>
</tr>
<tr>
<td>3C6</td>
<td>Vibration</td>
<td>Examination</td>
</tr>
<tr>
<td>3C7</td>
<td>Mechanics of solids</td>
<td>Examination</td>
</tr>
<tr>
<td>3C8</td>
<td>Machine design</td>
<td>Examination</td>
</tr>
<tr>
<td>3C9</td>
<td>Fracture mechanics of materials and structures</td>
<td>Examination</td>
</tr>
</tbody>
</table>
The Faculty Board of Engineering gives notice that the modules prescribed for the examinations to be held in 2020, and the mode of examination for each module, will be as listed below. The set list is published on the Department’s website at http://teaching19-20.eng.cam.ac.uk/content/part-iib-modules-sets-2019-20.

Candidates must offer eight modules for examination. Candidates may normally offer only one module from any set and not more than two 4E modules overall. In addition, candidates may take not more than three from the following: 4E modules, 4I1 and 4I7, 4M1–3, and (when available) 4D16. No candidate who offered any module for Part IIa may again offer the same module for Part IIb.

There will be no Group R (research) modules available to Part IIb candidates in 2019–20.

Please note that as the Faculty Board does not have exclusive control over imported modules it cannot guarantee that they will not clash with any other set.

Pre-requisites are listed below for new/revised modules only. For pre-existing modules the individual syllabus pages are the definitive source of information about pre-requisites. A summary is also given on the syllabus index page.
### Notes:

- **c** = coursework only
- **p** = examination only
- **p+c** = examination and coursework

<table>
<thead>
<tr>
<th>Unit</th>
<th>Name</th>
<th>Mode</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Group A: Energy, fluid mechanics and turbomachinery</strong></td>
<td></td>
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</tr>
<tr>
<td>4A2</td>
<td>Computational fluid dynamics</td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>4A3</td>
<td>Turbomachinery I</td>
<td>p+c</td>
<td></td>
</tr>
<tr>
<td>4A4</td>
<td>Aircraft stability and control</td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>4A7</td>
<td>Aircraft aerodynamics and design</td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>4A9</td>
<td>Molecular thermodynamics</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>4A10</td>
<td>Flow instability</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>4A12</td>
<td>Turbulence and vortex dynamics</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>4A13</td>
<td>Combustion and engines</td>
<td>p</td>
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<tr>
<td></td>
<td><strong>Group B: Electrical engineering</strong></td>
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<tr>
<td>4B2</td>
<td>Power microelectronics</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>4B5</td>
<td>Quantum and nano-technologies</td>
<td>p</td>
<td>Pre-req: 3B5</td>
</tr>
<tr>
<td>4B11</td>
<td>Photonic systems</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>4B13</td>
<td>Electronic sensors and instrumentation</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>4B19</td>
<td>Renewable electrical power</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>4B21</td>
<td>Analogue integrated circuits</td>
<td>p</td>
<td></td>
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<tr>
<td>4B23</td>
<td>Optical fibre communication</td>
<td>p+c</td>
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<tr>
<td>4B24</td>
<td>Radio frequency systems</td>
<td>p+c</td>
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<tr>
<td>4B25</td>
<td>Embedded systems for the internet of things</td>
<td>c</td>
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<tr>
<td>4B26</td>
<td>Advanced devices for high frequency electronics and biosensing</td>
<td>p</td>
<td>Pre-req: 3B5; rec: 3B1, 4B24</td>
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<tr>
<td></td>
<td><strong>Group C: Mechanics, materials and design</strong></td>
<td></td>
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</tr>
<tr>
<td>4C2</td>
<td>Designing with composites</td>
<td>p+c</td>
<td></td>
</tr>
<tr>
<td>4C3</td>
<td>Advanced functional materials and devices</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>4C4</td>
<td>Design methods</td>
<td>p</td>
<td>Shared with Part IIa</td>
</tr>
<tr>
<td>4C5</td>
<td>Design case studies</td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>4C6</td>
<td>Advanced linear vibrations</td>
<td>p+c</td>
<td></td>
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<tr>
<td>4C7</td>
<td>Random and non-linear vibrations</td>
<td>p+c</td>
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</tr>
<tr>
<td>4C8</td>
<td>Vehicle dynamics</td>
<td>p+c</td>
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</tr>
<tr>
<td>4C9</td>
<td>Continuum mechanics</td>
<td>p</td>
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<tr>
<td></td>
<td><strong>Group D: Civil, structural and environmental engineering</strong></td>
<td></td>
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<tr>
<td>4D4</td>
<td>Construction engineering</td>
<td>c</td>
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</tr>
<tr>
<td>4D5</td>
<td>Foundation engineering</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>4D6</td>
<td>Dynamics in civil engineering</td>
<td>p+c</td>
<td></td>
</tr>
<tr>
<td>4D7</td>
<td>Concrete and prestressed concrete</td>
<td>p+c</td>
<td>Pre-req: 2P8, 3D3, Eurocode 0 Lecture</td>
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<tr>
<td>4D9</td>
<td>Offshore geotechnical engineering</td>
<td>p</td>
<td>Pre-req: 3D2 assumed</td>
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<tr>
<td>4D10</td>
<td>Structural steelwork</td>
<td>p+c</td>
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<tr>
<td>4D13</td>
<td>Architectural engineering</td>
<td>c</td>
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<tr>
<td>4D14</td>
<td>Contaminated land and waste containment</td>
<td>p+c</td>
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<td><strong>Group E: Management and manufacturing</strong></td>
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<tr>
<td>4E1</td>
<td>Innovation and strategic management of intellectual property</td>
<td>c</td>
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<tr>
<td>4E3</td>
<td>Business innovation in a digital age</td>
<td>c</td>
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<tr>
<td>4E4</td>
<td>Management of technology</td>
<td>c</td>
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<tr>
<td>4E5</td>
<td>International business</td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>4E6</td>
<td>Accounting and finance</td>
<td>c</td>
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<tr>
<td>4E11</td>
<td>Strategic management</td>
<td>c</td>
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<tr>
<td>4E12</td>
<td>Project management</td>
<td>c</td>
<td>Part IIa Engineering students only</td>
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<td>Unit</td>
<td>Name</td>
<td>Mode</td>
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<td><strong>Group F: Information engineering</strong></td>
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<tr>
<td>4F1</td>
<td>Control system design</td>
<td>p+c</td>
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<tr>
<td>4F2</td>
<td>Robust and nonlinear systems and control</td>
<td>p</td>
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<tr>
<td>4F3</td>
<td>An optimisation based approach to control</td>
<td>p</td>
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<tr>
<td>4F5</td>
<td>Advanced information theory and coding</td>
<td>p</td>
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<td>4F7</td>
<td>Statistical signal analysis</td>
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<td>4F8</td>
<td>Image processing and image coding</td>
<td>p</td>
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<tr>
<td>4F10</td>
<td>Deep learning and structured data</td>
<td>p</td>
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<td>4F12</td>
<td>Computer vision</td>
<td>p</td>
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<tr>
<td>4F13</td>
<td>Probabilistic machine learning</td>
<td>c</td>
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<tr>
<td>4F14</td>
<td>Computer systems</td>
<td>p+c</td>
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<td><strong>Group G: Bioengineering</strong></td>
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<tr>
<td>4G1</td>
<td>Mathematical biology of the cell</td>
<td>c</td>
<td>Capped at 15 for Physics</td>
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<tr>
<td>4G3</td>
<td>Computational neuroscience</td>
<td>c</td>
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<tr>
<td>4G4</td>
<td>Biomimetics</td>
<td>c</td>
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<tr>
<td>4G6</td>
<td>Cellular and molecular biomechanics</td>
<td>p</td>
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<td><strong>Group M: Multidisciplinary modules</strong></td>
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<tr>
<td>4M1</td>
<td>French</td>
<td>c</td>
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<tr>
<td>4M2</td>
<td>German</td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>4M3</td>
<td>Spanish</td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>4M12</td>
<td>Partial differential equations and variational methods</td>
<td>p</td>
<td>Shared with Part IIA</td>
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<tr>
<td>4M16</td>
<td>Nuclear power engineering</td>
<td>p</td>
<td>Shared with Part IIA</td>
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<tr>
<td>4M17</td>
<td>Practical optimisation</td>
<td>c</td>
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<td>4M19</td>
<td>Advanced building physics</td>
<td>c</td>
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<tr>
<td>4M20</td>
<td>Robotics</td>
<td>c</td>
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<tr>
<td>4M21</td>
<td>Software engineering and design</td>
<td>p</td>
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<tr>
<td>4M22</td>
<td>Climate change mitigation</td>
<td>c</td>
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<tr>
<td><strong>Group I:</strong></td>
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<tr>
<td>4I1</td>
<td>Strategic valuation (TPE25)</td>
<td>c</td>
<td>Christmas vacation module; cap: 14; borrowed from M.Phil. in Technology Policy</td>
</tr>
<tr>
<td>4I7</td>
<td>Electricity and environment (TPE22)</td>
<td>c</td>
<td>Borrowed from M.Phil. in Technology Policy</td>
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<tr>
<td>4I8</td>
<td>Medical physics</td>
<td>p</td>
<td>Borrowed from Physics</td>
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<tr>
<td>4I10</td>
<td>Nuclear reactor engineering</td>
<td>p</td>
<td>Borrowed from M.Phil. in Nuclear Energy</td>
</tr>
<tr>
<td>4I11</td>
<td>Advanced fission and fusion systems</td>
<td>c</td>
<td>Borrowed from M.Phil. in Nuclear Energy</td>
</tr>
<tr>
<td>4I14</td>
<td>Biosensors and bioelectronics</td>
<td>c</td>
<td>Borrowed from Chemical Engineering and Biotechnology</td>
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</tbody>
</table>
Geographical Tripos, Parts I and II, 2020

The Faculty Board for Earth Sciences and Geography gives notice that, for the examination for Part I and Part II of the Geographical Tripos to be held in 2020, the papers to be offered will be examined as shown in the tables below.

In these tables, the following terms are defined:

(a) ‘Two+1 examination’: The assessment of such papers will consist of a conventional two-hour examination in which candidates will be asked to attempt two questions from a choice of not fewer than six questions. The papers will be undivided. In addition, there will be assessed coursework to be submitted not later than the division of the Easter Term in the year of the examination. The nature of the coursework required will be determined by the University Teaching Officer responsible for the co-ordination of the course, who will provide written details of the procedures which will be followed. The coursework will be equivalent to one question in quantity and for assessment in determining an overall mark for the Paper.

(b) ‘Three-hour examination’: The papers will be examined by a conventional unseen three-hour examination in which candidates will be asked to attempt three questions from a choice of not fewer than nine questions. The papers will be undivided.

### Part I

<table>
<thead>
<tr>
<th>Paper</th>
<th>General titles</th>
<th>Courses offered 2019–20</th>
<th>Mode of assessment</th>
</tr>
</thead>
</table>
| 1     | Living with global change | Part i: Core ideas  
Part ii: Core themes  
Part iii: Core skills | Two+1 examination |
| 2     | Human geography I | Austerity | Two+1 examination |
| 3     | Human geography II | Development theories, policies and practices | Two+1 examination |
| 4     | Human geography III | Citizenship, cities and civil society | Two+1 examination |
| 5     | Physical and environmental geography I | Quaternary climates and environment | Two+1 examination |
| 6     | Physical and environmental geography II | Glacial processes | Two+1 examination |
| 7     | Physical and environmental geography III | Biogeography | Two+1 examination |

### Part II

<table>
<thead>
<tr>
<th>Paper</th>
<th>General titles</th>
<th>Courses offered 2019–20</th>
<th>Mode of assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A prescribed topic or topics in human geography I</td>
<td>The geographies of global urbanism</td>
<td>Three-hour examination</td>
</tr>
<tr>
<td>2</td>
<td>A prescribed topic or topics in human geography II</td>
<td>Geographies of the Arctic</td>
<td>Two+1 examination</td>
</tr>
<tr>
<td>3</td>
<td>A prescribed topic or topics in human geography III</td>
<td>Political ecology in the global South</td>
<td>Three-hour examination</td>
</tr>
<tr>
<td>4</td>
<td>A prescribed topic or topics in human geography IV</td>
<td>Demographic continuity and change</td>
<td>Two+1 examination</td>
</tr>
<tr>
<td>5</td>
<td>A prescribed topic or topics in geography I</td>
<td>Environmental knowledges and the politics of expertise</td>
<td>Three-hour examination</td>
</tr>
<tr>
<td>6</td>
<td>A prescribed topic or topics in geography II</td>
<td>Geographies of postcolonialism and decoloniality</td>
<td>Two+1 examination</td>
</tr>
<tr>
<td>7</td>
<td>A prescribed topic or topics in geography III</td>
<td>Legal geographies</td>
<td>Two+1 examination</td>
</tr>
<tr>
<td>8</td>
<td>A prescribed topic or topics in geography IV</td>
<td>From Earth observations to the climate system</td>
<td>Three-hour examination</td>
</tr>
<tr>
<td>9</td>
<td>A prescribed topic or topics in physical geography I</td>
<td>Glaciology</td>
<td>Three-hour examination</td>
</tr>
<tr>
<td>10</td>
<td>A prescribed topic or topics in physical geography II</td>
<td>Volcanology</td>
<td>Three-hour examination</td>
</tr>
<tr>
<td>11</td>
<td>A prescribed topic or topics in physical geography III</td>
<td>Seascapes: temperate and tropical biosedimentary systems</td>
<td>Two+1 examination</td>
</tr>
<tr>
<td>12</td>
<td>A prescribed topic or topics in physical geography IV</td>
<td>Biogeography: biological processes and environmental change</td>
<td>Two+1 examination</td>
</tr>
</tbody>
</table>
Human, Social and Political Sciences Tripos: Variable papers

The Faculty Board of Human, Social and Political Science gives notice that the following variable papers will be offered in the Human, Social and Political Sciences Tripos in 2019–20.

Politics and International Relations

**Part I**

POL1. Modern state and its alternatives
POL2. International order, conflict and justice

**Part II**

POL3. International organisation
POL4. Comparative politics
POL5. Themes and issues in politics and international relations
POL6. Statistics and methods in politics and international relations
POL7. The history of political thought to c.1700
POL8/10. The history of political thought from c.1700 to c.1890
POL9. Conceptual issues and texts in politics and international relations
POL11. Political philosophy and the history of political thought since c.1890
POL12. The politics of the Middle East
POL13. British and European politics
POL14. US foreign policy
POL15. The politics of Africa
POL16. Conflict and peacebuilding
POL17. Law of peace: the law of emerging international constitutional order
POL18. Politics and gender
POL19. Themes and issues in politics and International Relations
POL20. Politics of the future, 1880–2080
POL21. China in the international order

Social Anthropology

**Part I**

SAN1. Social anthropology: the comparative perspective

**Part IIa**

SAN2. The foundations of social life
SAN3. Anthropological theory and methods
SAN4. The anthropology of an ethnographic area
   (a) Africa
   (c) Middle East
   (d) South Asia
   (e) Pacific

**Part IIb**

SAN5. Ethical life and the anthropology of the subject
SAN6. Power, economy and social transformation
SAN7. The anthropology of an ethnographic area
   (a) Africa
   (c) Middle East
   (d) South Asia
   (e) Pacific

**Part II Optional papers**

SAN9. Science and society
SAN12. Anthropology of cities and space
SAN13. Gender, kinship and care
Sociology

Part I

SOC1. Introduction to Sociology: modern societies I

Part II

SOC2. Social theory
SOC3. Modern societies II
SOC4. Concepts and arguments in sociology
SOC5. Statistics and methods
SOC6. A subject in sociology I: Advanced social theory
SOC7. A subject in sociology II: Media, culture and society
SOC8. A subject in sociology III: Religion and contentious mobilisation
SOC9. A subject in sociology IV: Global capitalism
SOC10. A subject in sociology V: Gender
SOC11. A subject in sociology VI: Racism, race and ethnicity
SOC12. A subject in sociology VII: Social problems in modern Britain
SOC13. A subject in sociology VIII: Health, medicine and society
SOC15. Criminology, sentencing and the penal system (Paper 34 of the Law Tripos)
CRIM1. Foundations in criminology and criminal justice
CRIM2. Statistics and methods (also serves as Paper SOC5)
CRIM3. Two long-essays on a Criminology topic
CRIM4. Criminology, sentencing and the penal system (also serves as Paper SOC15) (Paper 34 of the Law Tripos)
CRIM5. Social networks and crime

Manufacturing Engineering Tripos, Part IIa, 2019–20

The Faculty Board of Engineering gives notice that the modules prescribed for the examinations to be held in 2020 will be as follows:

3P1. Materials into products
3P2. Operation and control of production machines and systems
3P3. Product design
3P4. Operations management
3P5. Industrial engineering
3P6. Organisational behaviour
3P7. Managing business and people
3P8. Financial and management accounting
3P9. Industrial economics, strategy and governance
3P10. Contemporary issues in manufacturing

All modules will be assessed by examination only, with the exception of module 3P3, which will be assessed by coursework only.
Examinations in Environmental Policy; in Planning, Growth and Regeneration; in Real Estate Finance; and in Land Economy Research for the M.Phil. Degree, 2019–20

The Degree Committee for the Department of Land Economy gives notice that, for the examinations to be held in 2019–20, the form of examination for each module offered will be as follows:

Please note: In instances where Land Economy Research students opt to take modules normally assessed by written examination, the Examiners will be asked to provide a separate assignment. Where a module is usually in a combination of forms it is also likely that the candidate will be set a separate assignment. Details of any such substitute assignments will be notified to the candidate(s) concerned once they have been confirmed with the relevant Examiners.

Michaelmas and Lent Term Modules

The following modules will each be examined by a 4,000-word project in the Lent Term (50% of total mark) and by a two-hour written examination in the Easter Term (50% of total mark):

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Module Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP01</td>
<td>International environmental law</td>
</tr>
<tr>
<td>EP02</td>
<td>Environmental economics and policy</td>
</tr>
<tr>
<td>PGR01</td>
<td>Urban and environmental planning</td>
</tr>
<tr>
<td>PGR02</td>
<td>Urban and housing policy</td>
</tr>
<tr>
<td>RE01</td>
<td>Corporate finance and real estate</td>
</tr>
<tr>
<td>RE02</td>
<td>Real estate finance and investment</td>
</tr>
</tbody>
</table>

Michaelmas Term Modules

The following modules will each be examined by a 4,000-word project:

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Module Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RM01</td>
<td>Research methods</td>
</tr>
<tr>
<td>EP03</td>
<td>Environmental values</td>
</tr>
<tr>
<td>EP08</td>
<td>Comparative environmental policy</td>
</tr>
<tr>
<td>PGR04</td>
<td>Institutions and development I</td>
</tr>
<tr>
<td>RE04</td>
<td>The macroeconomy and housing</td>
</tr>
</tbody>
</table>

Lent Term Modules

The following modules will each be examined by a two-hour written examination:

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Module Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RM02</td>
<td>Further topics in quantitative methods</td>
</tr>
<tr>
<td>EP06</td>
<td>Energy and climate change</td>
</tr>
<tr>
<td>EP09</td>
<td>Rural environment: property, planning and policy</td>
</tr>
<tr>
<td>PGR03</td>
<td>Spatial economics</td>
</tr>
<tr>
<td>PGR05</td>
<td>Institutions and development II</td>
</tr>
</tbody>
</table>

The following modules will each be examined by a 4,000-word project:

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Module Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RM03</td>
<td>Spatial analysis and modelling</td>
</tr>
<tr>
<td>RE03</td>
<td>Property development processes</td>
</tr>
<tr>
<td>RE05</td>
<td>Legal issues in land use and finance</td>
</tr>
</tbody>
</table>

Rules of general application for written examinations

(i) Duration of written examinations

Where modules are examined by means of a written examination this will consist of a two-hour unseen written paper unless otherwise specified.

(ii) Relative weighting

Unless otherwise specified in the paper:

(a) within each paper, all questions will carry equal weight;

(b) within each question, all parts carry equal weight.

(iii) Use of Statute and other materials in examinations

Where candidates are permitted to use their own materials, no markings will be allowed in those materials nor will candidates be permitted to attach anything or insert anything within those materials. No spare copies of permitted materials will be made available for candidates in the examinations. Candidates infringing this rule may be required to surrender their copy and may be reported for the infringement. Except for essential valuation tables, candidates who have to surrender their copy will not be provided with replacement material to use in the examination.
(iv) **Use of calculators**

The permitted calculators for use in the Land Economy M.Phil. examinations will be the standard University calculator CASIO fx 115 (any version); CASIO fx 570 (any version) or CASIO fx991 (any version); the Hewlett Packard HP 10BII or HP 10BII+. Candidates may only bring one model of calculator into the examination hall. Candidates may not bring into the examinations external media associated with any calculator, such as instruction manuals, magnetic cards, or memory modules, but they may bring in spare batteries. Candidates are warned that the Examiners are not prepared to make allowances, when marking, for the malfunction of a candidate’s calculator for whatever reason.

(v) **Use of dictionaries**

Candidates may not bring into the examinations dictionaries of any sort.

**Rules of general application for projects, essays and coursework**

The following rules apply unless otherwise specified on assignments and essays:

(i) one hard copy of all assignments for examination should be submitted by the specified deadline, in addition to an electronic version in MS Word/PDF/Excel/PowerPoint submitted via Moodle;

(ii) candidates should not put their name on any piece of work submitted for examination; they should instead use their Departmental Candidate Number;

(iii) loose-leaf submissions are not acceptable, although candidates may choose to secure their work however they wish, i.e. file, binding, staple, etc.;

(iv) candidates will be required to submit a Project Declaration Form as a separate piece of paper with each project, indicating the module number/name, candidate number and name, and stating that it is all their own work, within the word limit, and that they agree to their work being checked by plagiarism detection software (Turnitin UK), should the need arise;

(v) penalties will be applied by the Board of Examiners in the event of late submission. This includes the late submission of the required electronic version;

(vi) penalties will be applied by the Board of Examiners in the event that the prescribed word limit is exceeded.

**REPORTS**

**First-stage Report of the Council on the construction of the National Centre for Propulsion and Power and re-development of the Whittle Laboratory**

The COUNCIL begs leave to report to the University as follows:

1. In this Report the Council is seeking approval in principle for the construction of a new National Centre for Propulsion and Power and re-development of the Whittle Laboratory at West Cambridge as set out below.

2. The Whittle Laboratory has been successful in securing funds from the Aerospace Technology Institute (ATI) and various industrial partners to establish a new experimental facility at Cambridge to serve as a National Centre for Propulsion and Power. The Whittle Laboratory has a distinguished record of translating fundamental research into design technologies which have been incorporated in many types of commercial aircraft engines. The resulting increases in efficiency, given the number in commercial service, has given savings in fuel burn and carbon emissions amounting to many times that incurred by building the proposed new facility. The aim of the Centre is twofold: to change radically the technology transfer process in aerospace and turbomachinery science; and to develop new technologies with the aim of decarbonising the propulsion and power sector.

3. The new facility will be located adjacent to the existing Whittle Laboratory on the West Cambridge site. As part of the project, existing accommodation for the Whittle Laboratory will be upgraded and expanded to provide new workshops and offices and the current single-storey office accommodation will be demolished. In total, approximately 3,550m² (gross internal area) of new building will be added to approximately 2,100m² (gross internal area) of retained laboratories and workshops. The investment will include a Propulsion and Power Challenge Space. This space will allow the wider University and industry to co-locate and to take on the challenge of decarbonising the propulsion and power sector. The Centre will work in partnership with the University’s Carbon Neutral Futures Initiative.

4. The capital cost of the proposed development is approximately £44m including the specialist equipment for the National Centre for Propulsion and Power. A grant of £13.5m has been secured from the ATI. £2m is expected to be secured from various industrial partners. An allocation of £5m has been committed by the University. At least £10m of the remaining funds are expected to be raised from external sources with the balance underwritten by the University. The costs of loose furniture and equipment and IT and AV costs will be funded by the Department of Engineering. As part of the investment the industrial partners have agreed £8m in direct support for research.

5. The construction works are planned to commence in 2021 and to be completed by December 2022. The works will include infrastructure enhancements to support the project and align with the West Cambridge Master Plan. These infrastructure works will be funded separately as a charge on the West Cambridge Infrastructure account.

6. The Concept Case for the project was approved by the Planning and Resources Committee on 22 May 2019. Further details relating to the design, maintenance, recurrent costs and proposals for funding will be brought to future meetings of the Buildings Committee and the Planning and Resources Committee. A Full Case will be prepared and a Second-stage Report will be published in due course to seek approval to implement the project.

7. A plan indicating the location of the project is below. Drawings of the proposed development are displayed for the information of the University in the Schools Arcade and are reproduced online at https://www.prao.admin.cam.ac.uk/capital-planning/plans-and-drawings.
8. The Council recommends:

I. That approval in principle be given for the construction of the National Centre for Propulsion and Power and the associated Whittle Laboratory redevelopment.

II. That the Director of Estate Strategy be authorised to apply for detailed planning approval in due course.

12 June 2019

STEPHEN TOOP, Vice-Chancellor
SAM AINSWORTH
EVIE ASPINALL
R. CHARLES
SHARON FLOOD
ANTHONY FREELING
NICHOLAS GAY

DAVID GREENAWAY
JENNIFER HIRST
NICHOLAS HOLMES
CHRISTOPHER KELLY
MARK LEWISOHN
JEREMY MORRIS
RICHARD PENTY

MICHAEL PROCTOR
SOFIA ROPEK-HEWSON
ANDREW SANCHEZ
SARA WELLER
MARK WORMALD

Location plan: proposed National Centre for Propulsion and Power and Whittle Laboratory redevelopment
Report of the General Board on Senior Academic Promotions

The General Board begs leave to report to the University as follows:

1. The senior academic promotions exercise in respect of promotions to take effect from 1 October 2019 has been completed. The General Board, at its meeting on 5 June 2019, considered recommendations from the Vice-Chancellor’s Senior Academic Promotions Committee in respect of promotion to personal Professorships, Readerships and Senior Lectureships. With the recommendations the Board received an extensive report, which provided the Board with an account of the procedure followed for the evaluation and comparison of the evidence for all applicants. The Board was able to see how recommendations had been arrived at so that, without repeating the entire exercise, it could either approve the recommendations or, if it so wished, consider the basis on which any of the recommendations had been made.

2. The contents of the report were as follows:
   - minutes of the Vice-Chancellor’s Committee and School Committees;
   - summary lists of Faculty Committee and School Committee evaluations and bandings, indicating adjustments and any special or non-standard aspects of applications;
   - summary tables giving names of applicants in priority order by School Committee for each of the senior academic offices;
   - funding and statistical information;
   - equal opportunity report on all applications received;
   - feedback statements.

3. The Board now recommends the establishment of 43 Professorships from 1 October 2019, as set out in Recommendation I. The establishment of these Professorships is proposed on condition that in each case where the person currently holds a permanently established office, that office should be placed in abeyance during the tenure of the Professorship.

4. The Board also proposes the establishment of 46 Readerships from 1 October 2019, as set out in Recommendation II. The establishment of these Readerships is proposed on condition that in each case where the person currently holds a permanently established office, that office should be placed in abeyance during the tenure of the Readership.

5. In order to avoid delay in publishing the Report, the Board has put forward its recommendations before the titles of the Professorships and Readerships have been agreed. The Board will announce these titles at a later date, after consultation with the individuals concerned.

6. The Board has also agreed, in accordance with Special Ordinance C (ix) 1 and the special regulation for University Senior Lectureships (Statistics and Ordinances, p. 760) to appoint the 34 individuals listed in the Schedule to this Report to University Senior Lectureships.

7. The estimated total additional cost to central funds in the first year of the proposals for promotion to personal Professorships and Readerships and of the appointments to University Senior Lectureships of the persons named in this Report will be approximately £876,458.

8. The General Board recommends:

   I. That, with effect from 1 October 2019, Professorships be established for each of the following named persons for one tenure, placed in the Schedule to Special Ordinance C (vii) 1, and assigned to the Faculty, Department, or Institution named in each case, as follows:

   School of Arts and Humanities

   Dr CAROLINE VOUT, CHR, assigned to the Faculty of Classics
   Dr RAPHAEL LYNE, MUR, assigned to the Faculty of English
   Dr HELENA SANSON, CL, assigned to the Department of Italian

   School of the Biological Sciences

   Dr UTA PASZKOWSKI, JN, assigned to the Department of Plant Sciences
   Dr JONATHAN SIMONS, EM, assigned to the Department of Psychology
   Dr MARK HOLMES, CHU, assigned to the Department of Veterinary Medicine
   Dr ELIZABETH MURCHISON assigned to the Department of Veterinary Medicine

   School of Clinical Medicine

   Dr EDMUND KUNJI, TH, assigned to the Department of Clinical Neurosciences
   Dr GEORGE VASSILIOU assigned to the Department of Haematology
   Dr MENNA CLATWORTHY, PEM, assigned to the Department of Medicine
   Dr ANTHONY DAVENPORT, CTH, assigned to the Department of Medicine
   Dr JASON CARROLL, CL, assigned to the Department of Oncology
   Dr MASASHI NARITA assigned to the Department of Oncology
   Dr DANIELA DE ANGELIS assigned to the Department of Public Health and Primary Care
   Dr MARTIN WHITE assigned to the Department of Public Health and Primary Care
II. That, with effect from 1 October 2019, **Readerships** be established, as follows, and that the General Board be authorised to appoint to each Readership the person for whom its establishment is proposed:

**School of Arts and Humanities**
Dr Emily So, M, assigned to the Department of Architecture
Dr Michael Rand assigned to the Department of Middle Eastern Studies
Dr Philip Connell, SE, assigned to the Faculty of English
Dr Maria Conde, JE, assigned to the Department of Spanish and Portuguese

**School of the Biological Sciences**
Dr Louise Boyle, ED, assigned to the Department of Pathology
Dr Ewan Smith, CC, assigned to the Department of Pharmacology
Dr Andrew Tanentzap, PET, assigned to the Department of Plant Sciences
Dr David Belin, HO, assigned to the Department of Psychology
Dr Cinzia Cantacessi assigned to the Department of Veterinary Medicine
School of Clinical Medicine
Dr Evan Reid, ED, assigned to the Department of Medical Genetics
Dr Mark Evans assigned to the Department of Medicine
Dr Sanjay Sinha assigned to the Department of Medicine
Dr Angela Wood, DAR, assigned to the Department of Public Health and Primary Care

School of the Humanities and Social Sciences
Dr Chrysi Giannitsarou, K, assigned to the Faculty of Economics
Dr Donald Robertson, PEM, assigned to the Faculty of Economics
Dr Shawn Bullock, EM, assigned to the Faculty of Education
Dr Yongcan Liu, DOW, assigned to the Faculty of Education
Dr Amy Erickson, R, assigned to the Faculty of History
Dr Renaud Moreux, JE, assigned to the Faculty of History
Dr Adam Branch, TH, assigned to the Department of Politics and International Studies
Dr Jonathan Morgan, CC, assigned to the Faculty of Law
Dr Sarah Nouwen, PEM, assigned to the Faculty of Law
Dr Stephen Watterson, TH, assigned to the Faculty of Law
Dr Daniel Margoczy assigned to the Department of History and Philosophy of Science
Dr Richard Staley, CAI, assigned to the Department of History and Philosophy of Science
Dr Jacob Stegenga, HH, assigned to the Department of History and Philosophy of Science

School of the Physical Sciences
Dr Luke Skinner, M, assigned to the Department of Earth Sciences
Dr Iris Möller, N, assigned to the Department of Geography
Dr Ian Willis, CTH, assigned to the Department of Geography
Dr Rajen Shah assigned to the Department of Pure Mathematics and Mathematical Statistics
Dr Perla Sousi, EM, assigned to the Department of Pure Mathematics and Mathematical Statistics
Dr Peter Varju assigned to the Department of Pure Mathematics and Mathematical Statistics
Dr Rachel Evans, JE, assigned to the Department of Materials Science and Metallurgy
Dr Alexander Archibald, EM, assigned to the Department of Chemistry
Dr Goncalo Lopes Bernardes, TH, assigned to the Department of Chemistry

School of Technology
Dr Christos Genakos, F, assigned to the Judge Business School
Dr Hatice Gunes Smith, TH, assigned to the Department of Computer Science and Technology
Dr Robert Mullins, JN, assigned to the Department of Computer Science and Technology
Dr Cesare Hall, K, assigned to the Department of Engineering
Dr Hannah Joyce, JN, assigned to the Department of Engineering
Dr Ajith Parlikad, HH, assigned to the Department of Engineering
Dr Stuart Scott, G, assigned to the Department of Engineering
Dr Ljiljana Fruk, SID, assigned to the Department of Chemical Engineering and Biotechnology
Dr Andrew Sederman, T, assigned to the Department of Chemical Engineering and Biotechnology

Non-School Institutions
Dr Samantha Williams, G, assigned to the Institute of Continuing Education

5 June 2019

Stephen Toope, Vice-Chancellor  A. L. Greer  Helen Thompson
Philip Allmendinger  Nicholas Holmes  Graham Virgo
John Dennis  Patrick Maxwell  Mark Wormald
Abigail Fowden  Richard Rex  Chris Young

1 Included under the School Committee for Humanities and Social Sciences in the statistical summary.
SCHEDULE

The General Board has agreed to appoint the following to University Senior Lectureships, with effect from 1 October 2019 to the retiring age.

School of Arts and Humanities
- Dr Myrto Hatzimichali, HO (Faculty of Classics)
- Dr Amy Morris (Faculty of English)
- Dr Sophie Read, CHR (Faculty of English)
- Dr Charlotte Lee, MUR (Department of German and Dutch)
- Dr Rebecca Reich, JE (Department of Slavonic Studies)

School of the Biological Sciences
- Dr Darerca Owen (Department of Biochemistry)
- Dr Aikaterini Artavanis-Tsakonas (Department of Pathology)
- Dr Elizabeth Soilleux, CHU (Department of Pathology)
- Dr Matthew Harper, JE (Department of Pharmacology)
- Dr Amy Milton, DOW (Department of Psychology)
- Ms Laura Owen (Department of Veterinary Medicine)
- Dr Timothy Lee Williams, F (Department of Veterinary Medicine)

School of Clinical Medicine
- Dr Paul Wilkinson, EM (Department of Psychiatry)

School of the Humanities and Social Sciences
- Dr Jenny Gibson, LC (Faculty of Education)
- Dr Rikka Hofmann, HH (Faculty of Education)
- Dr Rosalind McLellan, HO (Faculty of Education)
- Dr Julie Barrau, EM (Faculty of History)
- Dr Paul Cavill, PEM (Faculty of History)
- Dr Julia Guarneri, F (Faculty of History)
- Dr Chaiyi Leow, MUR (Faculty of History)
- Dr Mark Brian Smith, K (Faculty of History)
- Dr Hratch Papazian (Department of Archaeology)
- Dr Peter Soman, CHU (Department of Politics and International Studies)
- Dr Lauren Wilcox, SE (Department of Politics and International Studies)
- Dr Ella McPherson, Q (Department of Sociology)
- Dr Dominic de Cogan, CHR (Faculty of Law)
- Dr Claire Fenton-Glynn, JE (Faculty of Law)
- Dr Kirsty Hughes, CL (Faculty of Law)
- Dr Surabhi Ranganathan, K (Faculty of Law)
- Dr Matthias Felix Steffek, N (Faculty of Law)
- Dr Maria Abreu, PEM (Department of Land Economy)

School of Technology
- Dr Ronan Daly, CHU (Department of Engineering)
- Dr Thierry Savin, JE (Department of Engineering)
- Dr Bart Hallmark (Department of Chemical Engineering and Biotechnology)

STATISTICAL SUMMARY

Attached as Annex A to this Report is a statistical summary of the number of successful and unsuccessful applications for promotions by Professorships, Readerships and Senior Lectureships.

Senior Academic Promotions, 2019 – Annex A:
Statistical summary of outcomes

<table>
<thead>
<tr>
<th>School Committee</th>
<th>Successful</th>
<th>Unsuccessful</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts and Humanities</td>
<td>3 (1M 2W)</td>
<td>6 (5M 1W)</td>
<td>9 (6M 3W)</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>4 (2M 2W)</td>
<td>4 (4M 0W)</td>
<td>8 (6M 2W)</td>
</tr>
<tr>
<td>Clinical Medicine</td>
<td>8 (6M 2W)</td>
<td>0 (0M 0W)</td>
<td>8 (6M 2W)</td>
</tr>
<tr>
<td>Humanities and Social Sciences</td>
<td>13 (8M 5W)</td>
<td>3 (2M 1W)</td>
<td>16 (10M 6W)</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>7 (4M 3W)</td>
<td>4 (1M 3W)</td>
<td>11 (5M 6W)</td>
</tr>
<tr>
<td>Technology</td>
<td>8 (6M 2W)</td>
<td>5 (4M 1W)</td>
<td>13 (10M 3W)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43 (27M 16W)</strong></td>
<td><strong>22 (16M 6W)</strong></td>
<td><strong>65 (43M 22W)</strong></td>
</tr>
</tbody>
</table>
Readerships

<table>
<thead>
<tr>
<th>School Committee</th>
<th>Successful</th>
<th>Unsuccessful</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts and Humanities</td>
<td>5 (3M 2W)</td>
<td>7 (3M 4W)</td>
<td>12 (6M 6W)</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>5 (3M 2W)</td>
<td>4 (4M 0W)</td>
<td>9 (7M 2W)</td>
</tr>
<tr>
<td>Clinical Medicine</td>
<td>4 (3M 1W)</td>
<td>1 (1M 0W)</td>
<td>5 (4M 1W)</td>
</tr>
<tr>
<td>Humanities and Social Sciences</td>
<td>14 (10M 4W)</td>
<td>7 (3M 4W)</td>
<td>21 (13M 8W)</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>9 (6M 3W)</td>
<td>1 (1M 0W)</td>
<td>10 (7M 3W)</td>
</tr>
<tr>
<td>Technology</td>
<td>9 (6M 3W)</td>
<td>1 (1M 0W)</td>
<td>10 (7M 3W)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>46 (31M 15W)</td>
<td>21 (13M 8W)</td>
<td>67 (44M 23W)</td>
</tr>
</tbody>
</table>

University Senior Lectureships

<table>
<thead>
<tr>
<th>School Committee</th>
<th>Successful</th>
<th>Unsuccessful</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts and Humanities</td>
<td>5 (0M 5W)</td>
<td>1 (1M 0W)</td>
<td>6 (1M 5W)</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>7 (2M 5W)</td>
<td>2 (2M 0W)</td>
<td>9 (4M 5W)</td>
</tr>
<tr>
<td>Clinical Medicine</td>
<td>1 (1M 0W)</td>
<td>0 (0M 0W)</td>
<td>1 (1M 0W)</td>
</tr>
<tr>
<td>Humanities and Social Sciences</td>
<td>18 (6M 12W)</td>
<td>5 (4M 1W)</td>
<td>23 (10M 13W)</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>0 (0M 0W)</td>
<td>0 (0M 0W)</td>
<td>0 (0M 0W)</td>
</tr>
<tr>
<td>Technology</td>
<td>3 (3M 0W)</td>
<td>0 (0M 0W)</td>
<td>3 (3M 0W)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>34 (12M 22W)</td>
<td>8 (7M 1W)</td>
<td>42 (19M 23W)</td>
</tr>
</tbody>
</table>


The General Board begs leave to report to the University as follows:

1. The General Board recommends the establishment of a Professorship of Ophthalmology as set out in paragraph 2 below. The Resource Management Committee scrutinised the funding arrangements at the meeting held on 8 May 2019.

2. The Board has accepted an academic case from the Faculty Board of Clinical Medicine and the Council of the School of Clinical Medicine for the establishment for a single tenure for five years, from 1 August 2019, of a Professorship of Ophthalmology in the Department of Clinical Neurosciences. The salary costs of the Professorship will be shared as follows: 50% from Cambridge University Hospitals NHS Trust, 20% from the Van Geest Foundation Fund for Brain Repair and Neuroscience, 20% from the Cambridge Eye Trust, and 10% from Department funds. The tenure of the Professorship is limited to reflect the duration of the funding from the Van Geest Fund for Brain Repair and the Cambridge Eye Trust. The Board has agreed that election to the Professorship should be made by an ad hoc Board of Electors and that the candidature should be open to all persons whose work falls within the general field of the title of the office.

3. The General Board recommends:

1. That a Professorship of Ophthalmology be established in the University, for a single tenure, for five years from 1 August 2019 or the duration of the funding, whichever is the longer, placed in the Schedule to Special Ordinance C (vii) 1, and assigned to the Department of Clinical Neurosciences.

12 June 2019

Stephen Toope, Vice-Chancellor
Philip Allmendinger
John Dennis
Abigail Fowden
A. L. Greer

Nicholas Holmes
Matthew Kite
Patrick Maxwell
Richard Rex
Sofia Ropek-Hewson

Helen Thompson
Graham Virgo
Mark Wormald
Chris Young

GRACES

Graces submitted to the Regent House on 12 June 2019

The Council submits the following Graces to the Regent House. These Graces, unless they are withdrawn or a ballot is requested in accordance with the regulations for Graces of the Regent House (Statutes and Ordinances, p. 105) will be deemed to have been approved at 4 p.m. on Friday, 21 June 2019.

1. That the recommendations in paragraph 16 of the Report of the General Board, dated 1 May 2019, on arrangements for the implementation of the Academic Career Pathways scheme (Reporter, 6547, 2018–19, p. 562), as amended by the Council’s Notice dated 10 June 2019 (p. 668), be approved.
2. That in the regulations for the Undergraduate Admissions Committee (Statutes and Ordinances, p. 131), Regulation 1(g) be amended, Regulation 1(i) amended and renumbered as (j), and new Regulation 1(i) inserted, to read as follows, and the reference in Regulation 2 updated.\(^1\)

(g) seven members of the Regent House, being six representatives of the Councils of the Schools, appointed by the Council on the nomination of the General Board, and one further member appointed by the Council on its own nomination;

(i) a Head of a College appointed by the Colleges’ Standing Committee;

(j) not more than one person co-opted by the Committee, provided that it shall not be obligatory for the Committee to co-opt any person.

3. That Regulation 3 of the Procedures to Determine Fitness to Practise of Preclinical and Clinical Medical Students (Statutes and Ordinances, p. 222) be amended to read as follows:\(^2\)

3. Any person or body may refer any matter which gives a cause for concern about a medical student’s fitness to practise to the Clinical Dean who shall undertake a preliminary consideration of the matter and decide whether:

(a) The matter should be dismissed (because it is frivolous, vexatious, insufficiently serious, or for some other reason);

(b) The matter should be referred to the Student Progress Panel for support;

(c) The matter should be initially handled informally and the student shall be issued with a warning letter;

(d) The matter should be referred to the FTP Committee in accordance with these procedures.

4. That the regulations for the Paediatrics Prizes, including the sub-regulations for the Cow and Gate Prize and Fisons Prize and the Pharmacia and Upjohn Prize (Statutes and Ordinances, p. 925), be rescinded in their entirety.\(^3\)

5. That Regulation 7 for the Whittle Lab Studentship Fund (Statutes and Ordinances, p. 1012) be rescinded, and Regulations 3, 4, 5 and 8 (renumbered 7) amended as follows: \(^4\)

3. The capital and income of the Fund shall be used for the provision of one or more studentships to be called the Whittle Lab Studentships.

4. The Electors to the Studentships shall normally be all the University teaching officers at the Whittle Laboratory, who shall determine the number of Studentships to be awarded in any given year, after having regard to the level of the capital and income of the Fund.

5. In order to be eligible for a Studentship a candidate must have been admitted or be seeking admission as a registered Graduate Student in the University and normally with the intention of being based at the Whittle Laboratory.

7. Each Studentship shall provide

(a) a maintenance payment to be determined by the Electors, but normally at no more than the then current Engineering and Physical Sciences Research Council rate, or equivalent;

(b) a payment to cover all or part of the Student’s University and College fees.

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\(^1\) The Council, on the recommendation of the General Board and the Undergraduate Admissions Committee, is proposing these changes to the membership of the Committee to increase the number of members of the Regent House from four to seven (of which six would be appointed as representatives of the Councils of the Schools), add a Head of a College to the membership, and reduce the number of co-opted members from three to one.

\(^2\) See the Council’s Notice, p. 668.

\(^3\) The Council, on the recommendation of the General Board and the Faculty Board of Clinical Medicine, is proposing the removal of the regulations concerning these prizes, which were established by Graces 4 of 18 February 1981 and 8 of 18 May 1994. The donors no longer provide the annual funding for the prizes and the Department of Paediatrics now funds its own prizes.

\(^4\) The Council, on the recommendation of the General Board, the Faculty Board of Engineering and the Electors, is proposing these changes to enable more than one studentship to be awarded from the capital and income of the Fund.

E. M. C. RAMPTON, Registrary

END OF THE OFFICIAL PART OF THE ‘REPORTER’
**COLLEGE NOTICES**

**Vacancies**

*Downing College*: Williams Downing Fellowship in Economics 2019; tenure: five years from 1 October 2019; the appointment is jointly funded by Downing, Newnham, and St Edmund’s Colleges; salary: £36,620; closing date: 8 July 2019 at 5 p.m.; further details: [http://www.dow.cam.ac.uk/join-downing/staff-vacancies](http://www.dow.cam.ac.uk/join-downing/staff-vacancies)

*St John’s College*: Master; tenure: from 1 October 2020; closing date: 1 July 2019; further details: [https://candidates.perrettalver.com/vacancies/1394/election_of_master/](https://candidates.perrettalver.com/vacancies/1394/election_of_master/)

College Associate Lectureship and Fellowship in Economics; stipend: £36,261–£40,792, plus College benefits; tenure: three years; closing date: 5 July 2019; further details: [https://www.joh.cam.ac.uk/college-associate-lectureship-and-fellowship-economics](https://www.joh.cam.ac.uk/college-associate-lectureship-and-fellowship-economics)

**SOCIETIES, ETC.**

**Postdocs of Cambridge (PdOC) Society: AGM**

Annual General Meeting: 27 June 2019 (venue change)

The venue for the Postdocs of Cambridge (PdOC) Society Annual General Meeting (AGM), has changed (for the original notice see *Reporter*, 6548, 2018–19, p. 614). The meeting will now be held in the Top Floor Meeting Room, Grain and Hop Store, 69–76 Regent Street, Cambridge, CB2 1AB, on 27 June 2019, at 6.15 p.m. All postdocs associated or affiliated with the University of Cambridge, its Colleges and partner institutions are welcome to attend. For more information on the agenda, nominations for the committee, and a link for registration, please see [https://www.pdoc.cam.ac.uk](https://www.pdoc.cam.ac.uk).

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**EXTERNAL NOTICES**

**Oxford Notices**

*Exeter College*: Records Manager (fixed-term); salary: £28,660–£34,189 (pro-rata); closing date: 7 June 2019 at 12 noon; further details: [https://www.exeter.ox.ac.uk/vacancies/records-manager-fixed-term/](https://www.exeter.ox.ac.uk/vacancies/records-manager-fixed-term/)

*Lady Margaret Hall*: Stipendiary Lecturer in Law (six hours); salary: £13,513–£15,198; closing date: 26 June 2019 at 12 noon; further details: [https://www.lmh.ox.ac.uk/about-lmh/jobs/stipendiary-lectureship-law-6-hours](https://www.lmh.ox.ac.uk/about-lmh/jobs/stipendiary-lectureship-law-6-hours)

Stipendiary Lecturer in Law (four hours); salary: £9,008–£10,132; closing date: 26 June 2019 at 12 noon; further details: [https://www.lmh.ox.ac.uk/about-lmh/jobs/stipendiary-lectureship-law-4-hours](https://www.lmh.ox.ac.uk/about-lmh/jobs/stipendiary-lectureship-law-4-hours)

*Oriel College*: Stipendiary Lecturer in Classics (Greek and Latin Languages and Literature); salary: £18,017–£20,263; closing date: 5 July 2019; further details: [https://www.oriel.ox.ac.uk/people/vacancies/stipendiary-lecturer-greek-and-latin-languages-and-literature](https://www.oriel.ox.ac.uk/people/vacancies/stipendiary-lecturer-greek-and-latin-languages-and-literature)

Main Organising Tutor and Stipendiary Lecturer in Biomedical Sciences (four hours); salary: £9,008–£10,132; closing date: 24 June 2019; further details: [https://www.oriel.ox.ac.uk/people/vacancies/main-organising-tutor-stipendiary-lecturer-biomedical-sciences-4hr](https://www.oriel.ox.ac.uk/people/vacancies/main-organising-tutor-stipendiary-lecturer-biomedical-sciences-4hr)