

# CAMBRIDGE UNIVERSITY REPORTER

No 6557

WEDNESDAY 24 JULY 2019

VOL CXLIX No 39

## CONTENTS

### Notices

Calendar	837
Discussion on Tuesday, 8 October 2019	837
Election of a member of the Council's Finance Committee in class (b)	837
Notice of benefactions	837
Unregulated fees	840
Board of Scrutiny: Appointments made by the Council	840
First-stage Report of the Council on the construction of the National Centre for Propulsion and Power: Notice in response to Discussion remarks	840
Joint Report of the Council and the General Board on the governance of matters for postgraduate and graduate students: Notice in response to Discussion remarks	841
Annual Reports	842
University Combination Room closures	842
Retrospectivity concerning the LL.M. Degree	842

### Vacancies, appointments, etc.

Electors to the Bertrand Russell Professorship of Philosophy	843
Electors to the Professorship of Surgical Oncology	843
Electors to the Nanjing Professorship of Technology and Innovation	843
Elections and appointments	844

### Notices by the General Board

Senior Academic Promotions, 1 October 2019 exercise: Appointments and titles	844
Election of student members to Faculty Boards and other bodies	846
Heads of the Schools of the Biological Sciences and the Physical Sciences	849
Professorship of Chemical Engineering (1999)	849

### Regulations for examinations

Classical Tripos, Part IA	849
History and Modern Languages Tripos, Part Ib	850
Modern and Medieval Languages Tripos, Parts IA and IB	850
Ultra Precision Engineering for the M.Res. Degree	851
Diplomas and Certificates open to non-members of the University	851
Postgraduate Awards of Practitioner Professional Development	852

### Notices by Faculty Boards, etc.

Engineering Tripos, Parts IIA and IIB, 2019–20: Modules	852
Historical Tripos: Amendment, 2020 and subjects and periods, 2021	852
History and Politics Tripos, 2020: Amendment to variable subjects	854
M.Phil. Degrees, 2019–20:	
Bioscience Enterprise	854
Biotechnology	855
Energy Technologies	855
Engineering for Sustainable Development	856
Industrial Systems, Manufacture and Management	857
Machine Learning and Machine Intelligence	858
Nuclear Energy	858
M.Res. Degrees, 2019–20:	
Future Infrastructure and Built Environment	859
Future Propulsion and Power	860
Graphene Technology	861
Connected Electronic and Photonic Systems	861
Sensor Technologies and Applications	862

### Graces

Graces submitted to the Regent House on 24 July 2019	863
--	-----

### Acta

Approval of Graces submitted to the Regent House on 10 July 2019	865
Congregations of the Regent House on 19 July 2019	865
on 20 July 2019	872

*End of the Official Part of the 'Reporter'*

### College Notices

Elections	880
Vacancies	880
Awards and Prizes	880
Memorial Services	880

### External Notices

Oxford Notices	880
Wolf Institute	880



UNIVERSITY OF  
CAMBRIDGE

## NOTICES

### Calendar

1 October, *Tuesday*. Michaelmas Term begins. Congregation of the Regent House at 9.30 a.m.: Vice-Chancellor's address and the election and admission of the Proctors.

8 October, *Tuesday*. Full Term begins. Discussion in the Senate-House at 2 p.m. (see below).

This is the last ordinary issue of the *Reporter* for the 2018–19 academic year. The first ordinary issue of the 2019–20 academic year will be published on 25 September 2019.

### Discussion on Tuesday, 8 October 2019

The Vice-Chancellor invites those qualified under the regulations for Discussions (*Statutes and Ordinances*, p. 105) to attend a Discussion in the Senate-House on Tuesday, 8 October 2019 at 2 p.m., for the discussion of:

1. Topic of concern: The University response to the climate crisis beyond divestment (*Reporter*, 6552, 2018–19, p. 694).
2. Second-stage Report of the Council, dated 12 June 2019, on the construction of a new Heart and Lung Research Institute on the Cambridge Biomedical Campus (*Reporter*, 6555, 2018–19, p. 806).

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

### Election of a member of the Council's Finance Committee in class (b)

19 July 2019

The Head of the Registry's Office has received the following nomination for the Council's Finance Committee, for election in class (b) by the Representatives of the Colleges:

Dr RICHARD ANTHONY, *JE*, nominated by Ms L. M. Thompson, *LC*, and Dr M. R. Wormald, *PEM*

No other candidates having been nominated, Dr Anthony, currently a co-opted member of the Finance Committee in class (f), is duly elected to serve as a member of the Finance Committee in class (b) with immediate effect until 31 December 2020.

### Notice of benefactions

22 July 2019

The Vice-Chancellor gives notice that he has accepted with gratitude the following benefactions, of which both the capital and the income may be used:

- a benefaction of £10m from Viswanathan (Eashwar) Krishnan and Tzo Tze Ang, payable over up to ten years, £7,500,000 of which will be used to support a research facility focussed on the early detection of cancer within a new cancer research hospital, and for priority research areas in cancer, and £2,500,000 of which will be used to support Ph.D. studentships and postdoctoral researchers at Trinity College;
- a benefaction of £8m from The Hatton Trust to support the Foundation for Genomics and Population Health (the PHG Foundation) for a period of fourteen years;
- a benefaction of £4.5m from Gianna Angelopoulos to support the Gianna Angelopoulos Programme for Science, Technology and Innovation within the Department of Physics for five years; the Programme will focus on the advancement of research in the fields of computational multiphysics and energy materials and related science and technology areas;
- a further benefaction of £2.6m from the LEGO Foundation, payable over five years, to support the Centre for Research on Play in Education, Development and Learning (PEDAL) (see *Reporter*, 6390, 2014–15, p. 615);
- a benefaction of £2.5m from Huawei, payable over five years, to support Ph.D. students studying computer science and information engineering in the Department of Computer Science and Technology and the Department of Engineering, to be named the Huawei Studentships;
- benefactions totalling £1.3m from Baillie Gifford & Co, of which £700,000, payable over five years, will be used to support a Programme on Responsible AI within the Leverhulme Centre for the Future of Intelligence, and £600,000, payable over five years, will be used to support M.Phil. students in Arts and Humanities;
- a benefaction of £1,124,054 from Goldman Sachs Gives (UK) to support the Gnodde Goldman Sachs Translational Neuroscience Group of the Dementia Research Institute within the Department of Clinical Neurosciences, for a period of five years;
- a benefaction of £1m from Newton Investment Management Ltd to support the Centre for Endowment Asset Management within Cambridge Judge Business School for a period of ten years;
- a benefaction of £750,000 from a donor who wishes to remain anonymous, payable in two instalments, to support a University Lectureship in Palliative Care for ten years;

- a benefaction of £682,000 from Sir Harvey McGrath to support the Centre for Social Innovation, including funding for two Harvey McGrath Scholarships, in Cambridge Judge Business School for a period of one year;
- benefactions totalling £625,000 from The Pouroulis Foundation, of which £400,000, payable over four years, will be used to support a three-year doctoral studentship and a one-year postdoctoral fellowship on a ‘Cyprus in the Eastern Mediterranean’ research project, and £225,000, payable over three years, will be used to support a part-time Fellow in African Quaternary Archaeology and Hominin Palaeoecology over the same period, both in the Department of Archaeology;
- a benefaction of 5,000,000 Chinese Yuan (CNY) from Wuershan to support teaching and research in the Department of Social Anthropology, including the Mongolian and Inner Asia Studies Unit;
- a benefaction of £500,000 from the Solenum Foundation, payable over five years, to support the Centre for the Study of Existential Risk (CSER), an interdisciplinary research centre in the Centre for Research in the Arts, Social Sciences, and Humanities (CRASSH);
- philanthropic grants totalling US\$547,145 from The Kavli Foundation, payable over four years; a grant of \$208,198 is to support the Kavli Institute of Cosmology’s outreach programme including the funding of a Kavli Outreach Officer, and a grant of \$338,947 is to support the Institute’s Gravitational Waves programme by funding a Kavli Senior Fellowship in Gravitational Waves and two Kavli Summer Schools in Gravitational Waves over the same period. The University has agreed to provide contribution funding totalling £233,164 over the same period;
- a further benefaction of £420,000, payable over four years, from the Reuben Foundation, to further support the work of the Cambridge Bursary Scheme in awarding additional bursaries to at least 40 undergraduates, to be known as Reuben Bursaries, and to be awarded over the same period (see *Reporter*, 6515, 2017–18, p. 815);
- a benefaction of £385,000 from the Goldsmiths’ Company Charity, payable over two years, to support the Goldsmiths’ Company Charity Legacy Research Programme on Precious Metals for the Jewellery Industry;
- a further benefaction of US\$464,792 from the Dr Miriam and Sheldon G. Adelson Medical Research Foundation to support collaborative research across the Wellcome-MRC Cambridge Stem Cell Institute, Department of Clinical Neurosciences, and Department of Paediatrics, of which \$317,280 is to support research by Professor Robin Franklin on the effect of ageing on remyelination potential and \$147,512 is to support research by Professor David Rowitch on understanding cellular diversity and age-related repair efficiency in Multiple Sclerosis (see *Reporter*, 6515, 2017–18, p. 815);
- a benefaction of £360,000 from Sappi Europe SA, payable over three years, to support a fixed-term senior postdoctoral research fellowship within the Prince of Wales Global Fellowship Programme in the Cambridge Institute for Sustainability Leadership (CISL), to be named the Sappi Senior Fellowship;
- further benefactions totalling £336,682 from the A. G. Leventis Foundation in support of the following projects: to the Cambridge Conservation Initiative for a Programme Manager to develop the CCI Natural Capital Hub (£126,682 payable over two years); and to the Department of Archaeology, to fund a postdoctoral research fellowship in African Archaeology (£210,000 payable over three years);
- a benefaction of £330,000 from Unilever to support a fixed-term postdoctoral research fellowship within the Prince of Wales Global Fellowship Programme in the Cambridge Institute for Sustainability Leadership (CISL), to be named the Unilever Research Fellowship;
- a benefaction of £328,500 from Fetch.AI to support a research programme on the economics of blockchain technology for a period of three years, by funding a postdoctoral researcher, an annual conference, and a series of fora and dinners focused on the programme’s key research themes;
- a benefaction of up to £320,000 from Merky Foundation Limited to support four University scholarships, two beginning in 2018 and two beginning in 2019, to encourage black students to apply to the University in order to address the under-representation of black undergraduate students, to be named the Stormzy Scholarships;
- a benefaction of £300,000, from Paul and Michelle Gilding Pty Ltd, payable over three years, to support a fixed-term junior postdoctoral research fellowship within the Prince of Wales Global Fellowship Programme in the Cambridge Institute for Sustainability Leadership (CISL), to be named the Gilding Research Fellowship;
- a benefaction of £300,000 from Cambridge in America, following a donation from Royalty Pharma, payable over three years, to support the Cambridge Academy of Therapeutic Sciences (CATS), which was established in 2017 with the aim of establishing a world-leading platform for collaboration between academia and industry in the development of therapeutics;
- a philanthropic grant of £267,607 from the National Heritage Memorial Fund towards the purchase of a marble bust of Queen Victoria by Sir Alfred Gilbert, to be added to the Fitzwilliam Museum’s collection;
- a further benefaction of up to £258,750 from the Wolfson Foundation to fund three doctoral students for three years as part of the seventh cohort of Wolfson Postgraduate Scholars in the Humanities. The University and the Cambridge Trust have also agreed to contribute funding of £86,250 to enable a fourth scholarship to be offered (see *Reporter*, 6493, 2017–18, p. 354);
- a benefaction of £250,000 from a donor who wishes to remain anonymous, payable in five instalments, to support the Centre for the Study of Existential Risk (CSER), an interdisciplinary research centre in the Centre for Research in the Arts, Social Sciences, and Humanities (CRASSH);
- a bequest of £250,000 from the estate of a benefactor who wished to remain anonymous, to contribute to The Regius Professor of Physic Medical Leaders Fund to support medical students in the University;

- a further benefaction of £250,000 from ARM to support continuing research in the area of rigorous architecture specification in the Department of Computer Science and Technology (see *Reporter*, 6493, 2017–18, p. 354);
- a benefaction of £250,000 from DeepMind Technologies to support the work of Dr Robert N. M. Watson and Professor Peter Sewell, which it is currently intended will be used to support their programme of research known as RESET (Rigorous Engineering for Secure and Trustworthy Systems) within the Department of Computer Science and Technology;
- a benefaction of £250,000 from the Killinchy Hong Kong Settlement for the purpose of supporting the following at the Department of Engineering: (i) the Department’s Outreach Coordinator and team; and (ii) the Dyson Centre for Engineering Design, including honorarium payments for postgraduate student supervisors training undergraduate students;
- a benefaction of £250,000 from the Milner Foundation, payable over three years, to support the Centre for the Study of Existential Risk (CSER), an interdisciplinary research centre in the Centre for Research in the Arts, Social Sciences, and Humanities (CRASSH);
- a benefaction of £211,100 from the H. B. Allen Charitable Trust to support the research of Professor Manohar Bance, Department of Clinical Neurosciences, aiming to localise the sites of damage in different types of hearing loss, and to potentially diagnose previously unknown subtypes of deafness;
- a further benefaction of £200,000 from Winton Philanthropies to support the Isaac Newton Institute for the Mathematical Sciences;
- a benefaction of US\$200,000 from Cambridge in America, following a bequest from Jerome Rowitch, to support development of child health research in the Department of Paediatrics;
- an unrestricted grant of US\$200,000 from Cambridge in America, following a donation from the Berkeley Existential Risk Initiative, to support the work of the Centre for the Study of Existential Risk;
- a benefaction of £150,000 from Mr Jim and Mrs Alys Garman, payable over three years, to contribute support to extend the Insight and Insight+ widening participation programmes within the city of Cambridge;
- a benefaction of £148,000 from Mr Alex Callander, payable over two years, to support one M.Phil. studentship and one Ph.D. studentship in Cambridge Judge Business School;
- a benefaction of £143,985.41, the David J. Hall Legacy (via the Fitzwilliam Museum Development Trust) to support acquisition funds within the Fitzwilliam Museum’s Department of Manuscripts and Printed Books (MSSPB), as requested by David J. Hall, to be known as the ‘David Hall Purchase Fund for MSSPB’;
- a benefaction of £141,320 from the Canada-UK Foundation to support the Canada-UK Postdoctoral Fellowship Programme in the Office of Postdoctoral Affairs;
- a further benefaction of US\$170,000 from Microsoft Corporation to support the work of the Microsoft Cloud Computing Research Centre, which is a collaboration between the University’s Department of Computer Science and Technology and the Cloud Legal Project at Queen Mary University of London (see *Reporter*, 6493, 2017–18, p. 354);
- a benefaction of US\$140,000 from Huawei, which will be used to support research in the Department of Computer Science and Technology, as follows: \$90,000 to support Dr Robert N. M. Watson and Professor Simon Moore to further their research on designing micro-architectural solutions for CPU security and for validating the security of those designs; and \$50,000 to support Dr Sergei Skorobogatov to research countermeasures for mitigating hardware vulnerabilities in mobile processors;
- a benefaction of US\$165,371 from Cambridge in America, following a donation from the Deborah Loeb Brice Foundation, to support Art Conservation Studentships in the Hamilton Kerr Institute;
- a donation of 75,689 ITV shares (the sale of which has raised £119,039) from Dame Janet Wolfson de Botton to the University Library for the purpose of supporting the following acquisition: Vincent de Beauvais, *Miroir hystorial*, two volumes, Paris, 1531, from the Library of Michel de Montaigne;
- a further benefaction of up to £118,852 from Perennial – Gardeners’ Royal Benevolent Society, payable over five years, to support a Trainee Horticultural Technician Programme (one traineeship per year) at the Botanic Garden over the same period (see *Reporter*, 6353, 2013–14, p. 645);
- a benefaction of Swedish Krona 1,350,000 from the Axel and Margaret Ax:son Johnson Foundation for Public Benefit to support the Engelsberg Programme for Applied History, Grand Strategy and Geopolitics in the Department of Politics and International Studies, by promoting research and supporting events in the area of Applied History under the direction of the Forum on Geopolitics, led by Professor Brendan Simms;
- a benefaction of £114,700 from the Bosch Research Foundation to support a Ph.D. studentship in the Department of Computer Science and Technology;
- a benefaction of £100,000 from the Aldama Foundation to the Fitzwilliam Museum to support the acquisition of Nicolas Largillière’s portrait of Charles-Jean-Pierre de Barentin, Comte de Montchal;
- a benefaction of £100,000 from Mr Mark Hanson to support a programme of sports services for high performance scholar athletes at the University;
- a further benefaction from Ms Claire Barnes to the Department of Zoology, including support for a start-up fund for the incoming Claire Barnes Lecturer in Marine Biology; support for a Wynne-Simmons Studentship in Marine Biology; support for the Claire Barnes Studentship in the Biology and Ecology of Asia; and support for the Claire Barnes Studentship in Marine Biology under the supervision of the Claire Barnes Lecturer in Marine Biology (see *Reporter*, 6515, 2017–18, p. 815).

The Vice-Chancellor also gives notice that he has accepted with gratitude the following benefactions as endowment:

- a further benefaction of up to £5m from the Kavli Foundation as endowment funding, to be matched on a one-to-one basis by 1 December 2026, to support the Kavli Institute for Cosmology and to be added to the capital of the Kavli Institute Fund (*Statutes and Ordinances*, p. 876), of which matching funding has so far been contributed from Mr Gavin Boyle (£500,000) alongside £3.11m in underlying support from the University of Cambridge;
- a legacy of £596,188 under the will of Dr Mary Brenda Hesse to the University of Cambridge, which will be added to the Vice-Chancellor's Endowment Fund (*Statutes and Ordinances*, p. 1000).

The Vice-Chancellor also gives notice that he has accepted with gratitude a donation from Mr David Cramond to the University Library consisting of eighty letters between William Kemp and correspondents including Charles Darwin and Robert Chambers, dating from 1840 to 1861.

## Unregulated fees

22 July 2019

### Changes in the fee approval process for unregulated fees

The Council has agreed that, from 2019–20, the Planning and Resources Committee will be the approval body for unregulated fees, therefore Council approval and the publication of a Grace for the majority of routine fee-setting will no longer be required. The decisions on unregulated fees by the Planning and Resources Committee will be reported to the Council through its minutes and through the publication of fees. The approval process will remain rigorous but to a shorter timetable.

The University Composition Fees charged to Home and EU undergraduate students will continue to be subject to approval by Grace and accompanied by an analysis of the costs of an undergraduate education, in accordance with Regulation 12 of the regulations for University Composition Fees (*Statutes and Ordinances*, p. 151). Additional approval may also be sought for structural changes to fees, such as the introduction of a new band, or a change to the fee agreements between the University and the Colleges.

### Unregulated fees for 2020–21

The approved unregulated fees for 2020–21 are available at: <https://www.prao.admin.cam.ac.uk/fees/fee-schedules>

## Board of Scrutiny: Appointments made by the Council

22 July 2019

As there were two unfilled vacancies on the Board following a recent election (*Reporter*, 6551, 2018–19, p. 667), the Council was asked whether it wished to make appointments to the Board or to ask the Vice-Chancellor to arrange a further election, in accordance with Regulation 3 of the regulations for the election of members of the Board (*Statutes and Ordinances*, p. 114). Given that an election would have delayed appointments until the Lent Term 2020,<sup>1</sup> it decided to ask the Senior and Junior Proctors, both members of the Board of Scrutiny, to nominate two candidates for appointment. The Council, on the nomination of the Senior and Junior Proctors, has made the following appointments in the classes shown, to serve from 1 October 2019 for four years:

Class (c)(i) (a person who has been a member of the Regent House for not more than ten years on 1 October 2019):

Ms SABA ALA'I

Class (c)(ii) (a member of the Regent House):

Dr DAVID JAMES BUTTERFIELD, *Q*

<sup>1</sup> In accordance with Regulation 3 of the regulations for the election of members of the Council, which regulations also apply to the Board of Scrutiny (*Statutes and Ordinances*, p. 112).

## First-stage Report of the Council on the construction of the National Centre for Propulsion and Power: Notice in response to Discussion remarks

22 July 2019

The Council has received the remarks made at the Discussion on 2 July 2019 on the above Report (*Reporter*, 2018–19; 6551, p. 684; 6555, p. 809).

Mr Llaverio Pasquina raised a number of concerns about the links between the external organisations contributing to the cost of the National Centre for Propulsion and Power and the arms industry, and questioned the real objectives of this project. The external organisations involved are the Aerospace Technology Institute, Rolls-Royce, Mitsubishi and Siemens. The Aerospace Technology Institute was set up by government to help the UK realise the opportunity available of capturing a valuable share of the growing global civil aviation market. Its remit does not allow funding on military projects. The Whittle Laboratory has long-standing research relationships with these organisations. The Council is satisfied that continuing to engage with them, and others, to address the challenge of decarbonising the world's propulsion and power sectors is exactly what the University should be doing. The proposed new Centre will make a significant

contribution to this by adding to the University's research capability in this area. As explained by the Director of the Whittle Laboratory in his remarks at the same Discussion, this is the objective of this project. The Council also notes Professor Miller's comments that the Laboratory is not undertaking military research.

Dr Cowley questioned whether the University should be going ahead with this project in view of the relatively limited unrestricted liquid resources available for capital projects over the next five years. The National Centre for Propulsion and Power is one of a limited number of priority capital projects which has been earmarked by the Planning and Resources Committee (PRC) to be part-funded from the available unrestricted funds. The call on these funds for this project is likely to be around £18.5m (subject to the ongoing fundraising campaign to raise £10m) of the total estimated cost of £44m for the project. The Council endorses the emphasis the Planning and Resources Committee has placed on the importance of maximising the external funding for this project so as to reduce as far as possible the call on the Capital Fund. The Council notes that the current Report is the first stage in the process for approving this project. A second Report to the Regent House will follow should PRC recommend, and Council approve, proceeding with construction. As is routinely done, the Second-Stage Report will fully explain to the Regent House how the project is expected to be funded.

Dr Cowley also questioned why the project could not be phased with the accommodation for the National Centre being built initially and the offices and other accommodation to follow as a second phase once additional funding has been secured. Building the project in two phases would be significantly more expensive overall, more disruptive and more protracted than building it in a single phase. The location of the Whittle Laboratory is one of the most prominent on the West Cambridge site. Pre-application discussions with the Local Planning Authority (LPA) have indicated that the LPA would not support a modest shell building to house the National Centre in isolation without the linked 'gateway' building for the offices and ancillary accommodation. The only way to test this definitively would be to submit a planning application for the National Centre as a first phase. This would require a significant re-design to the current scheme and refusal of planning permission would be fatal to the entire project. Innovate UK and the Aerospace Technology Institute regard the current plan for delivery as slow, and only just acceptable in terms of delivering the research capability to the UK. Any further delay would put the project at significant risk and would be damaging to Cambridge's reputation with the Aerospace Technology Institute. The Council is not persuaded that phasing this project is the most appropriate course of action for the (short-term) cost reduction benefit which this might achieve.

The Council is submitting a Grace (Grace 3, p. 863) for the approval of the recommendations of this Report.

## **Joint Report of the Council and the General Board on the governance of matters for postgraduate and graduate students: Notice in response to Discussion remarks**

*22 July 2019*

The Council has considered the remarks made at the Discussion on 9 July 2019 on the above Report (*Reporter*, 2018–19; 6553, p. 726; 6556, p. 830). The Council has consulted with the General Board in the preparation of this response.

The Council acknowledges the careful work that the Board of Graduate Studies does, in particular in handling individual cases, but also notes the concerns raised both at the Discussion and during the consultation about overlap between the Board's work and new procedures for student examination and progress appeals.

Dr Cowley and Dr Padman both comment on the role of the Office of Student Conduct, Complaints and Appeals (OSCCA) and suggest that its function is to minimise risk to the University. The revisions made to the procedures over the last 15 years, since the introduction of the Office of the Independent Adjudicator as the external ombudsman, and more recently in the last three years since the introduction of OSCCA, have been to ensure that the University's procedures in relation to complaints and appeals are more transparent and accessible to students. That these measures are working to raise the profile of the procedures, increase engagement and provide more equitable outcomes has been evidenced by the growing numbers of complaints and appeals that have been received and the more consistent remedies that have been applied. The Council is grateful to the small panel of academic decision-makers who volunteer a significant period of time to considering student complaints and appeals and putting in place appropriate and proportionate remedies where necessary.

Mr Collinson suggests that the term 'graduate student' should be retained and applied to all post-undergraduate students. The Council is of the view that the proposed change in nomenclature is appropriate and reflects terminology used widely in the UK HE sector. It also avoids confusion between the status of undergraduates who have graduated from the University and students who are continuing with their studies after graduation from this or another university. Documents and websites commonly used will need to be reviewed and references updated, but the expectation is that this work will be undertaken as part of the regular review and update of material.

The Council agrees with Dr Padman that there is a need for change in the governance arrangements for postgraduate students. However, it does not agree that pushing back the implementation date of changes to Michaelmas Term 2020 would be helpful, particularly as the Report's proposals provide a new, more integrated body which will assume the main responsibilities of the Board of Graduate Studies, including a review of the matters that Dr Padman and others consider to require further thought, and cover transitional arrangements from Michaelmas Term 2019. Given the importance of the proposed changes both for students and academic governance in the University, the Council and the General Board continue to support the central proposals of the Report but have agreed to make the following changes put forward by Dr Padman and supported by others:

- (a) to place the Postgraduate Committee formally under the General Board, but still providing its minutes to the General Board's Education Committee to ensure that issues relating to postgraduate students continue to be considered by that Committee; and
- (b) to commit to bringing forward a Report to the Regent House on the proposals arising from the review to be conducted by the Postgraduate Committee.

Amendments would therefore be made to the Postgraduate Committee's terms of reference to reflect the change to the reporting line, by replacing references to the Education Committee with references to the General Board. The General Board has also agreed to amend the membership of the Postgraduate Committee in class (d), as suggested by Dr Cowley, which now reads as follows:

- (d) three members of the Regent House who have a broad subject balance and who have an interest in research student matters;

The Council is submitting a Grace (Grace 4, p. 863) for the approval of the recommendations of the Report, as amended by this Notice.

23 July 2019	STEPHEN TOOPE, <i>Vice-Chancellor</i>	NICHOLAS GAY	RICHARD PENTY
	SAM AINSWORTH	DAVID GREENAWAY	MICHAEL PROCTOR
	ALESSANDRO CECCARELLI	JENNIFER HIRST	ANDREW SANCHEZ
	R. CHARLES	CHRISTOPHER KELLY	JASON SCOTT-WARREN
	SHARON FLOOD	JEREMY MORRIS	SARA WELLER
	ANTHONY FREELING	EDWARD PARKER HUMPHREYS	JOCELYN WYBURD

23 July 2019	STEPHEN TOOPE, <i>Vice-Chancellor</i>	A. L. GREER	GRAHAM VIRGO
	PHILIP ALLMENDINGER	ALI HYDE	CHRIS YOUNG
	ALESSANDRO CECCARELLI	PATRICK MAXWELL	
	JOHN DENNIS	RICHARD REX	
	ABIGAIL FOWDEN	HELEN THOMPSON	

## Annual Reports

The following Annual Reports have been received by the Council and/or the General Board and are available as indicated:

Estate Management, 2017–18	<a href="https://www.em.admin.cam.ac.uk/what-we-do/annual-report-and-facts-figures">https://www.em.admin.cam.ac.uk/what-we-do/annual-report-and-facts-figures</a>
Fitzwilliam Museum and Hamilton Kerr Institute, 2017–18	<a href="https://www.fitzmuseum.cam.ac.uk/aboutus/mission">https://www.fitzmuseum.cam.ac.uk/aboutus/mission</a> (click the relevant link on the right-hand side)
Institute of Continuing Education, 2017–18	<a href="http://www.ice.cam.ac.uk/annual-report">http://www.ice.cam.ac.uk/annual-report</a>
Kettle's Yard, 2017–18	<a href="https://www.kettlesyard.co.uk/about/">https://www.kettlesyard.co.uk/about/</a> (click the relevant link on the left-hand-side)
University Library, 2017–18	<a href="http://www.lib.cam.ac.uk/about-library/library-management/annual-reports-library">http://www.lib.cam.ac.uk/about-library/library-management/annual-reports-library</a>
University Sport, 2017–18	<a href="https://www.sport.cam.ac.uk/files/annual_report_2018_v4.pdf">https://www.sport.cam.ac.uk/files/annual_report_2018_v4.pdf</a>

## University Combination Room closures

The University Combination Room will be closed as follows:

- Monday, 12 August 2019 until 9 a.m. on Tuesday, 27 August 2019 (for annual maintenance); and
- Thursday, 26 September 2019 (for a private event).

## Retrospectivity concerning the LL.M. Degree

The Registry gives notice that, under Regulation 9 for Supplicants (*Statutes and Ordinances*, p. 178; see also *Reporter*, 1984–85, p. 38), the following holder of the LL.B. Degree, who satisfied the Examiners for the LL.B. Examination before 1 October 1982, has now been redesignated as a holder of the LL.M. Degree:

*This content has been removed as it contains personal information.*

**VACANCIES, APPOINTMENTS, ETC.****Electors to the Bertrand Russell Professorship of Philosophy**

The Council has appointed members of the *ad hoc* Board of Electors to the Bertrand Russell Professorship of Philosophy as follows:

Ms Bridget Kendall, *PET*, in the Chair, as the Vice-Chancellor's deputy

*(a) on the nomination of the Council*

Professor Miranda Fricker, *City University of New York*  
Professor Katherine Hawley, *University of St Andrews*

*(b) on the nomination of the General Board*

Professor Timothy Lewens, *CL*  
Professor Lucy O'Brien, *University College London*  
Professor Timothy Williamson, *University of Oxford*

*(c) on the nomination of the Faculty Board of Philosophy*

Professor Rae Langton, *N*  
Professor Alex Oliver, *CAI*  
Professor Christopher Young, *PEM*

**Electors to the Professorship of Surgical Oncology**

The Council has appointed members of the *ad hoc* Board of Electors to the Professorship of Surgical Oncology as follows:

Professor Jane Clarke, *W*, in the Chair, as the Vice-Chancellor's deputy

*(a) on the nomination of the Council*

Dr Hugo Ford, *M*  
Professor Patrick Maxwell, *T*

*(b) on the nomination of the General Board*

Professor Rebecca Fitzgerald, *T*  
Professor Freddie Hamdy, *University of Oxford*  
Professor Evis Sala, *G*

*(c) on the nomination of the Faculty Board of Clinical Medicine*

Professor Sarah Blagden, *University of Oxford*  
Professor Richard Gilbertson, *JN*  
Professor Greg Hannon, *T*

**Electors to the Nanjing Professorship of Technology and Innovation**

The Council has appointed members of the *ad hoc* Board of Electors to the Nanjing Professorship of Technology and Innovation as follows:

Professor Athene Donald, *CHU*, in the Chair, as the Vice-Chancellor's deputy

*(a) on the nomination of the Council*

Professor Andrew Flewitt, *SID*  
Professor Sir Mark Welland, *CTH*

*(b) on the nomination of the General Board*

Professor John Dennis, *SE*  
Professor Eilis Ferran, *CTH*  
Professor Alwyn Seeds, *University College London*

*(c) on the nomination of the Faculty Board of Engineering*

Professor David Cardwell, *F*  
Professor Małgorzata Kujawińska, *Politechnika Warszawska*  
Professor Richard Prager, *Q*

## Elections and appointments

The following elections and appointments have been made:

### ELECTIONS

Professor Srinivasan Keshav, B.Tech., *Indian Institute of Technology, Delhi*, Ph.D., *University of California, Berkeley*, Professor, University of Waterloo, elected Robert Sansom Professor of Computer Science with effect from 1 October 2019.

Dr Giles Edward Dixon Oldroyd, B.S., *University of East Anglia*, Ph.D., *University of California, Berkeley*, Group Leader, Sainsbury Laboratory, elected Russell R. Geiger Professor of Crop Science with effect from 1 October 2019.

### APPOINTMENTS

#### University Senior Lecturer

*Judge Business School*. Dr Andrei A. Kirilenko, B.A., *Moscow*, M.A., Ph.D., *Pennsylvania*, appointed from 1 July 2019 until the retiring age.

#### University Lecturers

*Applied Mathematics and Theoretical Physics*. Dr Maria Bruna Estrach, B.Math., M.Eng., *Politecnica de Catalunya*, M.Sc., D.Phil., *Oxford*, appointed from 1 July 2019 until the retiring age and subject to a probationary period of five years.

*Law*. Dr Shona Wilson Stark, Ph.D., *G*, LL.B., LL.M., Dip.L.P., *Aberdeen*, appointed from 1 October 2019 until the retiring age and subject to a probationary period of five years. Mr Bobby Vijay Reddy, B.A., LL.M., *G*, PG.Dip., LPC, *Guildford*, appointed from 1 January 2020 until the retiring age and subject to a probationary period of five years.

*Medicine*. Dr Matthew William Hoare, M.B. B.Chir., Ph.D., *R*, MRCP, appointed from 1 January 2020 until the retiring age and subject to a probationary period of five years.

*Modern and Medieval Languages*. Dr Miranda Helen Griffin, B.A., M.Phil., Ph.D., *NH*, appointed from 1 September 2020 until the retiring age and subject to a probationary period of five years.

### CORRECTION

In the original Notice published on 10 July 2019 (*Reporter*, 6555, 2018–19, p. 798), the appointment of Dr Sheffield was mistakenly placed within the Divinity entry rather than in Classics. The Notice has since been amended to include the following:

*Classics*. Dr Frisbee Candida Cheyenne Sheffield, B.A., *Bristol*, M.Phil., *N*, D.Phil., *Oxford*, appointed from 1 September 2019 until the retiring age and subject to a probationary period of five years.

## NOTICES BY THE GENERAL BOARD

### Senior Academic Promotions, 1 October 2019 exercise: Appointments and titles

In its Report, dated 5 June 2019, on Senior Academic Promotions (*Reporter*, 6551, 2018–19, p. 686), the General Board recommended the establishment of 43 Professorships and 46 Readerships.<sup>1</sup> In Paragraph 5 it was stated that the Board would announce the titles at a later date after consultation with the individuals concerned. The recommendations of the Report were approved by Grace 2 of 10 July 2019. The following list of appointments includes the titles that have been agreed.

#### PROFESSORSHIPS

##### With effect from 1 October 2019

##### *School of Arts and Humanities*

Dr CAROLINE VOUT, *CHR*, appointed Professor of Classics

Dr RAPHAEL LYNE, *MUR*, appointed Professor of Renaissance Literature

Dr HELENA SANSON, *CL*, appointed Professor of Italian, History of Linguistics, and Women's Studies

##### *School of the Biological Sciences*

Dr UTA PASZKOWSKI, *JN*, appointed Professor of Plant Molecular Genetics

Dr JONATHAN SIMONS, *EM*, appointed Professor of Cognitive Neuroscience

Dr MARK HOLMES, *CHU*, appointed Professor of Microbial Genomics and Veterinary Science

Dr ELIZABETH MURCHISON appointed Professor of Comparative Oncology and Genetics

<sup>1</sup> One applicant has since elected not to take up the office of Reader.

*School of Clinical Medicine*

Dr EDMUND KUNJI, *TH*, appointed Professor of Biophysics  
 Dr GEORGE VASSILIOU appointed Professor of Haematological Medicine  
 Dr MENNA CLATWORTHY, *PEM*, appointed Professor of Translational Immunology  
 Dr ANTHONY DAVENPORT, *CTH*, appointed Professor of Cardiovascular Pharmacology  
 Dr JASON CARROLL, *CL*, appointed Professor of Molecular Oncology  
 Dr MASASHI NARITA appointed Professor of Senobiology  
 Dr DANIELA DE ANGELIS appointed Professor of Statistical Science for Health  
 Dr MARTIN WHITE appointed Professor of Population Health Research

*School of the Humanities and Social Sciences*

Dr CATHERINE BURKE appointed Professor of History of Education  
 Dr NIDHI SINGAL, *HH*, appointed Professor of Disability and Inclusive Education  
 Dr ANDREAS STYLIANIDES, *HH*, appointed Professor of Mathematics Education  
 Dr ANNABEL BRETT, *CAI*, appointed Professor of Political Thought and History  
 Dr PETER SARRIS, *T*, appointed Professor of Late Antique, Medieval and Byzantine Studies  
 Dr SUJIT SIVASUNDARAM, *CAI*, appointed Professor of World History  
 Dr PAUL WARDE, *PEM*, appointed Professor of Environmental History  
 Dr DAVID SNEATH, *CC*, appointed Professor of Social Anthropology  
 Dr DUNCAN BELL, *CHR*, appointed Professor of Political Thought and International Relations  
 Dr JUDITH BROWNE, *K*, appointed Professor of Politics and Public Policy  
 Dr ALBERTINA ALBORS-LLORENS, *JN*, appointed Professor of European Union Law  
 Dr JENS SCHERPE, *CAI*, appointed Professor of Comparative Law  
 Dr BENJAMIN CREWE appointed Professor of Penology and Criminal Justice

*School of the Physical Sciences*

Dr MARIE EDMONDS, *Q*, appointed Professor of Volcanology and Petrology  
 Dr JASON MILLER, *T*, appointed Professor of Probability  
 Dr VASILY BELOKUROV appointed Professor of Astronomy  
 Dr CATERINA DUCATI, *T*, appointed Professor of Nanomaterials  
 Dr JASON ROBINSON, *JN*, appointed Professor of Materials Physics  
 Dr ERIKA EISER, *SID*, appointed Professor of Soft Matter Physics  
 Dr AUSTEN LAMACRAFT, *JN*, appointed Professor of Theoretical Physics

*School of Technology*

Dr AHMED KHWAJA appointed Professor of Marketing, Business and Public Enterprise  
 Dr WAH MAK appointed Professor of Marketing and Decision Sciences  
 Dr ALASTAIR BERESFORD, *Q*, appointed Professor of Computer Security  
 Dr PAULA BUTTERY, *CAI*, appointed Professor of Language and Machine Learning  
 Dr MATEJA JAMNIK appointed Professor of Artificial Intelligence  
 Dr ANDREW MOORE, *CC*, appointed Professor of Networked Systems  
 Dr PER OLA KRISTENSSON, *T*, appointed Professor of Interactive Systems Engineering  
 Dr SEBASTIAN SAVORY, *CHU*, appointed Professor of Optical Fibre Communication

## READERSHIPS

**With effect from 1 October 2019***School of Arts and Humanities*

Dr EMILY SO, *M*, appointed Reader in Architectural Engineering  
 Dr MICHAEL RAND appointed Reader in Hebrew and Aramaic  
 Dr PHILIP CONNELL, *SE*, appointed Reader in Literature and History  
 Dr MICHAEL HURLEY, *CTH*, appointed Reader in Literature and Theology  
 Dr MARIA CONDE, *JE*, appointed Reader in Brazilian Studies and Visual Culture

*School of the Biological Sciences*

Dr LOUISE BOYLE, *ED*, appointed Reader in Molecular Immunology  
 Dr EWAN SMITH, *CC*, appointed Reader in Nociception  
 Dr ANDREW TANENTZAP, *PET*, appointed Reader in Global Change Ecology  
 Dr DAVID BELIN, *HO*, appointed Reader in Behavioural Neuroscience  
 Dr CINZIA CANTACESSI appointed Reader in Parasite Infection Biology

*School of Clinical Medicine*

Dr EVAN REID, *ED*, appointed Reader in Neurogenetics and Molecular Neurobiology  
 Dr MARK EVANS appointed Reader in Diabetic Medicine  
 Dr SANJAY SINHA appointed Reader in Cardiovascular Regenerative Medicine  
 Dr ANGELA WOOD, *DAR*, appointed Reader in Health Data Science

*School of the Humanities and Social Sciences*

Dr CHRYSI GIANNITSAROU, *K*, appointed Reader in Macroeconomics and Finance  
 Dr DONALD ROBERTSON, *PEM*, appointed Reader in Econometrics  
 Dr SHAWN BULLOCK, *EM*, appointed Reader in the History of Science, Technology and Education  
 Dr YONGCAN LIU, *DOW*, appointed Reader in Applied Linguistics and Languages Education  
 Dr AMY ERICKSON, *R*, appointed Reader in Feminist History  
 Dr RENAUD MORIEUX, *JE*, appointed Reader in British and European History  
 Dr ADAM BRANCH, *TH*, appointed Reader in International Politics  
 Dr JONATHAN MORGAN, *CC*, appointed Reader in English Law  
 Dr SARAH NOUWEN, *PEM*, appointed Reader in International Law  
 Dr STEPHEN WATTERSON, *TH*, appointed Reader in Private Law  
 Dr DANIEL MARGOCSY, appointed Reader in History of Science, Technology and Medicine  
 Dr RICHARD STALEY, *CAI*, appointed Reader in History and Philosophy of Science  
 Dr JACOB STEGENGA, *HH*, appointed Reader in Philosophy of Science

*School of the Physical Sciences*

Dr LUKE SKINNER, *M*, appointed Reader in Earth System Science  
 Dr IAN WILLIS, *CTH*, appointed Reader in Glaciology  
 Dr RAJEN SHAH appointed Reader in Statistics  
 Dr PERLA SOUSI, *EM*, appointed Reader in Probability  
 Dr PETER VARJU appointed Reader in Pure Mathematics  
 Dr RACHEL EVANS, *JE*, appointed Reader in Materials Chemistry  
 Dr ALEXANDER ARCHIBALD, *EM*, appointed Reader in Atmospheric Chemistry  
 Dr GONCALO LOPES BERNARDES, *TH*, appointed Reader in Chemical Biology

*School of Technology*

Dr CHRISTOS GENAKOS, *F*, appointed Reader in Economics and Policy  
 Dr HATICE GUNES SMITH, *TH*, appointed Reader in Affective Intelligence and Robotics  
 Dr ROBERT MULLINS, *JN*, appointed Reader in Computer Architecture  
 Dr CESARE HALL, *K*, appointed Reader in Aerothermal Engineering  
 Dr HANNAH JOYCE, *JN*, appointed Reader in Low-Dimensional Electronics  
 Dr AJITH PARLIKAD, *HH*, appointed Reader in Asset Management  
 Dr STUART SCOTT, *G*, appointed Reader in Energy and Thermodynamics  
 Dr LJILJANA FRUK, *SID*, appointed Reader in BioNano Engineering  
 Dr ANDREW SEDERMAN, *T*, appointed Reader in Magnetic Resonance in Engineering

*Non-School Institutions*

Dr SAMANTHA WILLIAMS, *G*, appointed Reader in Social History

**Election of student members to Faculty Boards and other bodies**

22 July 2019

**With effect from 1 October 2019**

The General Board proposes amendments to the way in which student representation on Faculty Boards and other bodies is structured, and to the electoral process for those roles, to increase clarity and streamline processes.

These changes are being put forward in response to a review of student academic representation carried out in 2018–19, conducted jointly by the Students' Unions and the Education Quality and Policy Office, on behalf of the General Board's Education Committee. This review included consultation with students, Faculties, Departments and Schools. The outcome of the review was that students lacked clarity on the student membership roles available, and how these fed into the University committee structures. Faculties and Departments generally felt that the process was inflexible and bureaucratic; in some areas established local practice was well-supported but others reported that attempting to overlay informal and formal structures contributed to students' lack of identification with formal roles. Student engagement with elections was low, and elected representatives reported difficulties in communicating with the wider student body to seek feedback and input into committee business.

A consultation on proposed changes was circulated to all Faculty Boards and other bodies in May 2019. Conclusions and recommendations were reported to the General Board's Education Committee on 12 June 2019.

The Council is submitting a Grace (Grace 5, p. 863) to seek approval for the following recommendations of the General Board:

1. The Board proposes that the election of student representatives for Faculty Boards and other bodies should be aligned to subject disciplines, in place of the current organisationally-driven structure. Subject representative roles will be determined by Cambridge University Students' Union (CUSU) and the Graduate Union (GU) in collaboration with Faculty Boards and published annually by Notice in the *Reporter*, with each course being mapped to one or more available roles. The proposed structure provides a flexible framework, enabling well-established local systems to continue if desired.
2. Corresponding amendments to General Board Regulations governing the election of student members to Faculty Boards and other bodies should be made to remove the maximum number of members in class (f), and introduce a minimum of two. Above this minimum, each Board may choose its desired number of members in class (f). Regulations should further be amended to remove limitations on eligibility based on course and year of study, fellowships, and sabbatical office. These restrictions were not clear to students and have caused errors in the electoral rolls.
3. Administration and organisation of the electoral process should be managed jointly by CUSU, the GU and the Education Quality and Policy Office, with opportunities for Boards and other bodies to undertake local promotion as desired. This joint management would reinforce a collaborative approach between the Unions and the University, providing a clearer and more cohesive view of how elected subject representatives feed into wider University decision-making processes. The Unions would continue to have a recognised role in training and supporting representatives.
4. Elections should take place in a single window during the second half of the Michaelmas Term, aligned with existing CUSU/GU elections. The General Board acknowledges that in responding to the consultation, many Boards and other bodies expressed a wish to have earlier elections, albeit noting that this might not always be suitable from the students' perspective. However, the Board believes that alignment with existing Union elections in which students already participate will give greater profile to these roles and hopefully engage more in voting for them. Bringing together the administration of elections would also make it easier to amend the timing of elections in future, should this be desired. As above, the flexible framework for establishing subject representative roles and how these relate to the Faculty Board or other relevant bodies would enable a variety of models to be implemented in response to each Board's wishes.
5. The Board does not, at this time, propose to include Council of the School student members in the changes to align representation with subjects. These will remain a separately-elected role aligned with the specific organisational body. However, changes to General Board Regulations relating to student eligibility and organisation will impact these roles, and they will be elected in the same window.
6. The Board proposes making the following amendments to General Board Regulations and associated procedures with effect from 1 October 2019:
  - (a) General Regulations for the Constitution of the Faculty Boards (*Statutes and Ordinances*, p. 605)
    - (i) Changing Regulation 1(f) to reference eligible students as determined by Regulation of the General Board instead of students in the Faculty;
    - (ii) Changing Regulations 2(a) and 2(b) to introduce a minimum of two student members and remove the upper limit.
  - (b) Regulations for Classes of Faculty Board Membership, Elections and Periods of Office (*Statutes and Ordinances*, p. 607)
    - (i) Changing Regulation 1 to remove the specified numbers in class (f) from the table in Schedule I, and to permit each Faculty Board to determine an appropriate number in line with Regulation 2 of the General Regulations;
    - (ii) Changing Regulation 9 to draw members in class (f) from students elected as subject representatives (or exceptionally, with the approval of the Registry in an individual case, from those eligible to stand for election as subject representatives) in accordance with the Regulations for the Election of Student Subject Representatives (see below).
  - (c) Regulations for the Election of Student Members of Faculty Boards and Other Bodies (*Statutes and Ordinances*, p. 608) (see the Annex for the text of the revised Regulations)
    - (i) Amending the title of these Regulations to the 'Election of Student Subject Representatives';
    - (ii) Assigning responsibility for these elections to CUSU/GU as part of their overall electoral scheme;
    - (iii) Defining available roles and the courses which map to each role by Notice, to be published in the *Reporter* by CUSU/GU by 20 October each year;
    - (iv) By incorporating information about eligibility to stand for election and vote in these Regulations (electoral rolls will continue to be centrally generated but will be provided to CUSU/GU in line with existing CUSU/GU roll dates at the Division of Michaelmas Term);
    - (v) Enabling the Council to appoint the returning officer on the nomination of CUSU/GU;
    - (vi) Amending the table in Schedule I to remove class (f);
    - (vii) Deleting Schedule IV;
    - (viii) Deleting Schedule V.

- (d) Deleting the Rules made by the General Board in accordance with Regulation 11 for the election of student members of Faculty Boards and other bodies (*Statutes and Ordinances*, p. 612), as these have been incorporated in the Regulations under (c).
- (e) Deleting the Procedure for allocation to electoral rolls of candidates for the Natural Sciences Tripos and the Medical Sciences Tripos and the Veterinary Sciences Tripos (*Statutes and Ordinances*, p. 613), as allocation to the relevant subject representatives will be defined in the Unions' yearly Notice.

## ANNEX

In accordance with paragraph 6(c) above, the following regulations will replace the regulations for the Election of student members of Faculty Boards and other bodies (*Statutes and Ordinances*, p. 608) with effect from 1 October 2019:

### ELECTION OF STUDENT SUBJECT REPRESENTATIVES

1. These regulations shall apply to the election of subject representatives who are eligible to serve on each Faculty Board or other University body whose membership includes student members, except in so far as may be provided otherwise in the special regulations for a particular Faculty Board or other body.

2.(a) The persons eligible to vote and to stand for election as subject representatives shall be those who are certified by the Registry to be matriculated students pursuing a given course of study or research leading to a degree, diploma or certificate of the University, as identified by Notice under Regulation 4. Any question of interpretation of eligibility shall be determined by the Registry, whose decision shall be final.

(b) The Registry shall not include in the electoral roll the name of any sabbatical officer of Cambridge University Students' Union and the Graduate Union who has, before completing a course of study leading to the degree for which he or she intends to be a candidate, been given an allowance under Regulation 1(b) for Allowances to Candidates for Examinations for the purpose of holding such office.

3. An election for each subject representative shall be held in each academic year as outlined in the electoral scheme published by the Unions on their websites. Voting shall be by ballot. The date and procedure of the election, the final date for the receipt of nominations, and the hours of voting shall be determined by the returning officer identified in the Unions' electoral scheme.

4. Cambridge University Students' Union and the Graduate Union shall publish a Notice confirming

- (a) not later than 20 October each year, the subject representative roles for which elections will be held and the total number of vacancies. This Notice shall confirm by course the students who are eligible to stand for election to, and vote for, each of the subject representatives;
- (b) the returning officer appointed by the Council<sup>1</sup> on the nomination of Cambridge University Students' Union and the Graduate Union;
- (c) the location on the websites of the Cambridge University Students' Union and the Graduate Union of the electoral scheme governing the elections.

5. Not later than the Division of the Michaelmas Term, the Registry shall send to the returning officer an electoral roll of all the persons who on 9 November were eligible, under the provisions of Regulation 1 of the General Regulations for the Constitution of the Faculty Boards and of these regulations, to vote and to stand as candidates in the election. The roll shall be undivided, and the returning officer shall confer eligibility corresponding to the categories determined in accordance with Regulation 2. The Registry shall have power, on the recommendation of the returning officer, to amend the roll at any time before the time fixed for the start of voting.

6. If at any election of a student subject representative the total number of vacancies is not filled, the returning officer may fix a date for the holding of a further election to fill those vacancies. Unless the returning officer determines otherwise, the persons eligible to vote and to stand as candidates in such an election shall be those persons who were so eligible in the preceding election; provided that no such person may vote or be a candidate in a further election if the Registry certifies that he or she is no longer entitled to be included in the relevant electoral roll.

7. If a casual vacancy occurs, the returning officer shall determine whether a bye-election shall be held to fill the vacancy and shall determine the date on which any such election is to be held. Unless the returning officer determines otherwise, the persons eligible to vote and to stand as candidates in a bye-election shall be those persons who were eligible at the time of the last preceding annual election to vote and to stand as candidates in the election to the place which has been vacated, provided that no such person may vote or be a candidate in a bye-election if the Registry certifies that he or she is no longer entitled to be included in the relevant electoral roll.

<sup>1</sup> The Council has delegated this responsibility to its Committee for the Supervision of the Student Unions (CCSSU).

## Heads of the Schools of the Biological Sciences and the Physical Sciences

The General Board and the respective Councils of the Schools have approved the following appointments:

Professor ANNA PHILPOTT, *CL*, Deputy Head of the Department of Oncology, as Head of the School of the Biological Sciences for four years from 1 August 2019;

Professor NIGEL PEAKE, *EM*, Head of the Department of Applied Mathematics and Theoretical Physics, as Head of the School of the Physical Sciences for four years from 1 January 2020.

Professor Philpott and Professor Peake will serve alongside the other current Heads of School:

Professor Christopher Young, *PEM*, Head of the School of Arts and Humanities until 31 December 2022;

Professor Patrick Maxwell, *T*, Head of the School of Clinical Medicine (Regius Professor of Physic);

Professor Philip Allmendinger, *CL*, Head of the School of the Humanities and Social Sciences until 30 September 2020;

Professor John Dennis, *SE*, Head of the School of Technology until 30 September 2022.

## Professorship of Chemical Engineering (1999)

22 July 2019

The Professorship of Chemical Engineering will fall vacant on 30 September 2020. The General Board has received a recommendation from the Chemical Engineering and Biotechnology Syndicate that, in accordance with Special Ordinance C (vii) B. 18(a), the period of consultation concerning the vacancy be extended to 31 October 2021.

The Council has agreed to submit a Grace (Grace 6, p. 863) to extend the period of consultation for the Professorship.

## REGULATIONS FOR EXAMINATIONS

### Classical Tripos, Part IA

(*Statutes and Ordinances*, p. 295)

#### With effect from 1 October 2019

The General Board, on the recommendation of the Faculty Board of Classics, has approved the following changes to the regulations for Part IA of the Classical Tripos to enable the intensive Greek course, currently examined by Paper 2, to be divided into two streams, a ‘beginners’ stream and a ‘post-G.C.S.E. or equivalent’ stream.

Regulation 13.

By replacing the entry for Paper 2 with the following:

Paper 2A.      Alternative Greek languages and texts (Option A) (also serves as Paper GL 2A of Part IA of the Modern and Medieval Languages Tripos)

Paper 2B.      Alternative Greek languages and texts (Option B) (also serves as Paper GL 2B of Part IA of the Modern and Medieval Languages Tripos)

Regulation 14.

By replacing the text of Regulation 14 with the following:

**14.** Every candidate shall offer Paper 1 or Paper 2A or Paper 2B, either Paper 3 or Paper 4, and Paper 5. In addition, a candidate may offer one or both of Papers 6 and 7. No candidate may offer more than one of Paper 2A, Paper 2B and Paper 4.

Paper 1 is for candidates who had A-Level (or equivalent) in Greek before entry to the University. Paper 2A is for candidates who had no knowledge of Greek before entry to the University. Paper 2B is for candidates who had G.C.S.E. (or equivalent) but not A-Level (or equivalent) in Greek before entry to the University. Paper 3 is for candidates who had A-Level (or equivalent) in Latin before entry to the University or who have previously taken the Preliminary Examination to Part IA of the Classical Tripos. Paper 4 is intended for candidates who did not have A-Level (or equivalent) in Latin before entry to the University and who have not previously taken the Preliminary Examination to Part IA of the Classical Tripos.

## History and Modern Languages Tripos, Part IB

(*Statutes and Ordinances*, p. 345)

### With effect from 1 October 2020

Further to the General Board's Notice below, the following changes to the regulations for Part IB of the History and Modern Languages Tripos have been approved.

Regulation 15.

*Modern Languages*

By amending paragraph (i) to read as follows:

- (i) *French, German, Italian, Russian, Spanish (Option B)*

Translation and foreign language through the media (also serves as Paper B3 of the Modern and Medieval Languages Tripos) and oral examination B3 (also serves as oral examination B3 in the Modern and Medieval Languages Tripos).

## Modern and Medieval Languages Tripos, Parts IA and IB

(*Statutes and Ordinances*, p. 392)

PART IA

### With effect from 1 October 2019

Following the approval of changes to the Classical Tripos (p. 849), consequential changes have been made to the regulations for Part IA of the Modern and Medieval Languages Tripos as follows:

Regulation 20(b).

By amending Option A to read as follows:

- Option A. Papers GL 2A or GL 2B and GL 5.

### SCHEDULE C

By replacing the entry for GL 2 with the following:

- GL 2A. Alternative Greek languages and texts (Paper 2A of Part IA of the Classical Tripos)  
 GL 2B. Alternative Greek languages and texts (Paper 2B of Part IA of the Classical Tripos)

PART IB

### With effect from 1 October 2020

The General Board, on the recommendation of the Faculty Board of Modern and Medieval Languages, has approved changes to Part IB of the Modern and Medieval Languages Tripos and the History and Modern Languages Tripos (see the Notice above) in respect of the language examination for Option B languages. The changes are introduced in response to feedback from External Examiners and students on the nature of the existing language examination in Part IB, in particularly in relation to the use of audio-visual material during written examinations and the current lack of an oral examination for Option B students in their second year.

Under the revised regulations, existing Paper B3 (*Translation into the foreign language and language by audio-visual media*) will be replaced by a new Paper B3 (*Translation and foreign language through the media*) and a new oral examination B3. The new written Paper B3 and oral examination B3 will be weighted as one whole paper for examination in Part IB. The written element will be weighted at 66% of the total mark and the oral examination as 33% of the total mark.

Regulation 23.

By amending sub-paragraph (a)(iv) to read as follows:

- (iv) *either* a third paper from Schedule IB  
*or* Paper B3, together with oral examination B3 in the language in which he or she previously offered Option B;

By amending sub-paragraph (b) to read as follows:

- (b) a candidate who offered two modern languages in Part IA, choosing Option B in each, shall offer in Part IB Paper B3, together with oral examination B3, in each of the two languages, and three papers chosen from Schedule IB;

### SCHEDULE A

By amending the title of Paper B3 to *Translation and foreign language through the media*

By inserting 'oral examination B3' after Oral examination B.

## SUPPLEMENTARY REGULATIONS

(*Statutes and Ordinances*, p. 401)

## PARTS IA AND IB

By including a reference to oral examination B3 in the second bold heading so it reads as follows:

**Papers B1, B2 and B3, and Oral Examinations B and B3**

Paper B3.

By amending the regulation to read as follows:

*Paper B3. Translation and foreign language through the media*

The examination for this paper will consist of the following two written papers, which will each account for a maximum of one third of the marks, and the oral examination, which will account for the remaining third of the marks (see below):

- (a) Translation into the foreign language, in which candidates will translate one 300-word passage; and
- (b) Foreign language through the media, in which candidates will answer one of two questions relating to video clips they have studied during the year; answers will be written in the foreign language and will be between 300 and 400 words in length.

By inserting the following new regulation:

*Oral examination B3*

This oral examination is part of Paper B3 (see above) and will account for a maximum of one third of the marks for the paper. The oral examination will be ten minutes in duration. Video clips, which will be between twelve and fifteen minutes long, will be made available to all candidates three days prior to the oral examination. Candidates will be asked to provide a two-minute presentation on the subject matter of the video clip. This will then be followed by an eight-minute conversation with two Examiners in which subject matter and approach will be explored and analysed.

## Ultra Precision Engineering for the M.Res. Degree

(*Statutes and Ordinances*, p. 552)

**With effect from 1 October 2019**

The General Board, on the recommendation of the Faculty Board of Engineering, has approved the suspension of the examination in Ultra Precision Engineering for the degree of Master of Research for the 2019–20 academic year. The special regulations for the examination have been amended to include a footnote noting their suspension.

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

(*Statutes and Ordinances*, p. 593)

**With immediate effect**

The list of certificates offered by the Faculty of Education in the Schedule of Diplomas and Certificates open to non-members of the University has been updated to reflect the titles of the postgraduate awards currently offered by the Faculty as part of its programme of practitioner professional development.

*Certificates*

*Faculty of Education*<sup>1</sup>

Postgraduate Advanced Certificate in Educational Studies  
 Postgraduate Certificate in Educational Studies  
 Postgraduate Award in Educational Studies

**With effect from 1 October 2019**

Further to the Notice published on 15 May 2019 (*Reporter*, 6547, 2018–19, p. 562), the Schedule of Diplomas and Certificates open to non-members of the University has also been amended, with effect from 1 October 2019, to include the new CULP Award in Portuguese.

*Certificates*

*Language Centre*

CULP Award in Portuguese

<sup>1</sup> See the Schedule to the regulations for the Postgraduate Awards of Practitioner Professional Development for a list of the courses offered for these awards.

## Postgraduate Awards of Practitioner Professional Development

(*Statutes and Ordinances*, p. 596)

### With immediate effect

The list of courses in the Schedule has been updated to reflect the courses currently offered as part of the Faculty of Education's postgraduate awards programme:

By adding the following course to the Schedule:

*60-credit practitioner professional development courses*

Educational assessment and examinations

And by removing the following courses from the Schedule:

*30-credit practitioner professional development courses*

Teaching Shakespeare

Teaching and learning through dialogue

Contemporary issues in music education

### With effect from 1 October 2020

The General Board has also approved the following amendments to the Schedule to the regulations.

By adding the following courses to the Schedule:

*30-credit practitioner professional development courses*

Transforming practice

*60-credit practitioner professional development courses*

Transforming practice

*90-credit practitioner professional development courses*

Educational assessment

Transforming practice

And by removing the following course from the Schedule:

*60-credit practitioner professional development courses*

Educational assessment and examinations

## NOTICES BY FACULTY BOARDS, ETC.

### Engineering Tripos, Parts IIA and IIB, 2019–20: Modules

#### PART IIB: MODULES

The Faculty Board of Engineering gives notice of a correction to the list of modules published on 12 June 2019 (*Reporter*, 6551, 2018–19, p. 676). The following module will no longer be offered:

*Group M: Multidisciplinary modules*

4M3: Spanish

### Historical Tripos: Amendment, 2020 and subjects and periods, 2021

#### Subjects and periods, 2020: Amendment

Further to the Notices published on 25 July 2018 (*Reporter*, 6516, 2017–18, p. 851) and on 1 May 2019 (*Reporter*, 6545, 2018–19, p. 495), the Faculty Board of History gives notice of an amendment to the specified subjects for Part II of the Historical Tripos in 2020, as follows:

#### PART II

By withdrawing the following from the list of specified subjects:

28. The history of the Indian sub-continent from the late eighteenth century to the present day

The Faculty Board is satisfied that no candidate's preparation for examination will be adversely affected by this amendment.

**Historical Tripos, 2021: Subjects and periods**

The Faculty Board of History gives notice that the options for Paper 1 of Part I of the Historical Tripos, 2021 (*Statutes and Ordinances*, p. 338) will be as follows:

*Themes and sources:*

- i Money and society from late antiquity to the financial revolution
- ii Royal and princely courts: ancient, medieval and early modern
- iv Remaking the modern body, 1543–1939
- v Land, property and power in America, c.1500–2000
- vi Comparative histories of race, class and culture: Southern Africa, 1850–2013
- vii Performance and power in ancient and medieval cities
- viii Imagining Ancient Rome in film, television and popular culture
- ix The history of collecting
- x Wealth and poverty in West Africa, from the slave trades to the present
- xi Utopian writing 1516–1789
- xii Fighting for Algeria, fighting for France, 1945–1962 (French sources)
- xiii Earning a living 1377–1911: work, occupations, gender and economic development in England
- xiv Film and society 1946–1969: the remaking of national identities

The Faculty Board of History gives notice that the Special Subjects for Papers 2 and 3 of Part II of the Historical Tripos, 2021 (*Statutes and Ordinances*, p. 340) will be as follows:

- Roman religion: identity and empire [associated with C2 of Part II of the Classical Tripos] (A)
- The ‘Angevin Empire’, 1150s–1230s (B)
- Memory in early modern England (C)
- Uses of the visual in early modern Germany, c.1450–1550 (D)
- The Palace and the Coffeehouse: The power of place in Ottoman history, 1300–1800 (E)
- The culture of the miraculous in Renaissance Italy (G)
- The 1848 Revolutions (I)
- The British and the Ottoman Middle East, 1798–1850 (J)
- Fin de siècle Russia, 1891–1917 (K)
- The transformation of everyday life in Britain, 1945–1990 (L)
- Empires and the American imagination, c.1763–c.1900 (M)
- Central European cities: Budapest, Prague, Vienna, 1450–1914 (N)
- Missionary science, ethnic formation, and the religious encounter in Belgian Congo (O)
- Sources of East Asian modernity, c.1895–1927 (P)
- Indian democracy: ideas in action, c.1947–2007 (Q)

The subjects for the following papers in Part II of the Historical Tripos, 2021 (*Statutes and Ordinances*, p. 340) will be:

- 1 Historical argument and practice
- 4 History of political thought from c.1700 to c.1890
- 5 Political philosophy and the history of political thought since c.1890
- 6 States between states: the history of international political thought from the Roman Empires to the early nineteenth century
- 7 Transformation of the Roman world [Paper C4 of Part II of the Classical Tripos]
- 8 The Near East in the age of Justinian and Muhammad, AD527–700
- 9 Slavery in the Greek and Roman worlds [Paper C3 of Part II of the Classical Tripos]
- 10 Living in Athens [Paper C1 of Part II of the Classical Tripos]
- 11 Early medicine [Paper BBS113 of NST Part II Biological and Biomedical Sciences]
- 12 The middle ages on film: medieval violence and modern identities
- 13 Man, nature and the supernatural, c.1000–c.1600
- 14 Material culture in the early modern world
- 15 The medieval globe [Paper A24 of Part II of the Archaeology Tripos]
- 16 Overseas expansion and British identities, 1585–1714
- 17 The politics of knowledge from the late Renaissance to the early Enlightenment
- 18 Japanese history [Paper J6 of Part II of the Asian and Middle Eastern Studies Tripos]
- 19 Women, gender and paid work in Britain since c.1850
- 20 World population, development and environment since 1750: comparative history and policy
- 21 Borderlands: life on the Habsburg–Ottoman frontier, 1521–1881
- 22 Stalinism and Soviet life
- 23 The long road to modernisation: Spain since 1808
- 24 The ‘rule of law’ in early modern Britain: state power, criminal justice and civil liberties, c.1500–c.1800

- 25 Ireland and the Irish since the Famine
- 26 Consumption and consumer culture in the United States
- 27 The history of Latin America, from 1500 to the present day
- 28 The history of the Indian sub-continent from the late eighteenth century to the present day
- 29 The history of Africa from 1800 to the present day
- 30 The problem of sustainability, 1500–1987

Candidates for Part II in 2021, who have previously taken Part I of the Historical Tripos and who did not offer in that Part a paper falling mainly in the period before 1750, may meet the requirement to take a pre-1750 paper in Part II by offering one of the Special Subjects A, B, C, D, E or G or by offering one of the Papers 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 21 or a dissertation, provided that its subject falls mainly in the period before 1750.

Candidates for Part II in 2021, who have previously taken Part I of the Historical Tripos and who did not offer in that Part a paper in European History, may meet the requirement to take a European History paper in Part II by offering one of the following papers: 7, 8, 14, 21, 22 and 23.

## History and Politics Tripos, 2020: Amendment to variable subjects

Further to the Notice published on 5 June 2019 (*Reporter*, 6550, 2018–19, p. 653), the Faculty Board of History gives notice of an amendment to the variable subjects to be examined in Part II of the History and Politics Tripos in 2019–20, as follows:

### Section C

By withdrawing the following from the list of History papers:

- 28. The history of the Indian sub-continent from the late eighteenth century to the present day

The Faculty Board is satisfied that no candidate's preparation for examination will be adversely affected by this amendment.

## Bioscience Enterprise for the M.Phil. Degree, 2019–20

The Degree Committee for the Faculty of Engineering gives notice that the modules available to candidates studying the one-year course in Bioscience Enterprise for the degree of Master of Philosophy (*Statutes and Ordinances*, p. 518) in the academic year 2019–20 and the form of examination of each module will be as shown below.

The Degree Committee for the Faculty of Engineering may issue amendments to the lists below during the Michaelmas Term 2019, provided that no candidate's preparation for the examination will be affected by the change.

### Science and Technology (ST) modules

ST1	Treating disease	Coursework
ST2	Drug discovery I	Coursework
ST3	Drug discovery II	Coursework
ST4	Diagnostics and devices	Coursework
ST5	Agbiotech	Coursework

### Business (B) modules

B1, B2, B3	Management of technology and innovation	Coursework
B4	Healthcare economics	Coursework
B5	Law and intellectual property	Coursework

### Transitory (T) modules

T1	Company analysis I: partnerships and alliances	Coursework
T2	Company analysis II: finance and valuation	Coursework
T3	Building a bioscience enterprise I	Coursework
T4	Building a bioscience enterprise II	Coursework

### Joint assessments

Several principal individual assessments cover material from multiple modules, and include written papers on selected topics in science and technology in business (each of 4,000 words maximum) and a business plan submission. These assessments are:

STB1	Science and technology in business, paper I
STB2	Science and technology in business, paper II
T5	Business plan

Coursework includes individual and/or group activities, to address one or a selected combination of report, critical appraisal, extended paper, or audio-visual presentation and may include engagement in approved extracurricular activities.

All candidates are required to complete a dissertation of up to 10,000 words (Reference: E1) on a topic approved by the Degree Committee, and will give a presentation on the project work at a symposium (Reference: E2).

## Biotechnology for the M.Phil. Degree, 2019–20

The Degree Committee for the Faculty of Engineering gives notice that the modules available to candidates studying the one-year course in Biotechnology for the degree of Master of Philosophy (*Statutes and Ordinances*, p. 518) in the academic year 2019–20 and the form of examination of each module will be as shown below.

The Degree Committee for the Faculty of Engineering may issue amendments to the lists below during the Michaelmas Term 2019, provided that no candidate's preparation for the examination will be affected by the change.

### Core modules

BPT	Principles of biotechnology (double module)	Coursework
BPC	Biotechnology practical course (double module)	Coursework

### Elective modules (candidates must take six)

B3	Pharmaceutical engineering	Examination
C1	Optical microscopy	Examination
C3	Healthcare biotechnology	Examination
C6	Biosensors and bioelectronics	Coursework
C7	Bionanotechnology	Examination
C8	Biophysics (techniques)	Examination
BX1	Chemical biology and drug discovery	Coursework
BX2	Biomaterials	Coursework and examination
4G1	Mathematical biology of the cell	Coursework
4G3	Computational neuroscience	Coursework
4G4	Biomimetics	Coursework
4G6	Cellular and molecular biomechanics	Examination
SB	Systems biology	Examination
4E1	Innovation and strategic management of intellectual property	Coursework
4E4	Management of technology	Coursework
4E5	International business	Coursework
4I8	Medical physics	Examination

### Research

All candidates are required to complete an individual project report of up to 7,000 words (reference: BIRP) and to complete a team project assessed by a report of up to 7,000 words (reference: BGRP).

## Energy Technologies for the M.Phil. Degree, 2019–20

The Degree Committee for the Faculty of Engineering gives notice that the modules available to candidates studying the one-year course in Energy Technologies for the degree of Master of Philosophy (*Statutes and Ordinances*, p. 525) in the academic year 2019–20, and the form of examination of each module, will be as shown below.

The Degree Committee for the Faculty of Engineering may issue amendments to the lists below during the Michaelmas Term 2019, provided that no candidate's preparation for the examination will be affected by the change.

### Core courses (compulsory)

ETA1	Energy topics	Coursework
ETA2	Revision of fundamentals	Coursework
ETB1	Clean fossil fuels	Coursework
ETB2	Renewables 1: wind, wave, tidal and hydro	Coursework
ETB3	Renewables 2: solar and biofuels	Coursework
ETB4	Energy systems and efficiency	Coursework

### Electives

4A2	Computational fluid dynamics	Coursework
4A3	Turbomachinery I	Coursework and examination
4A4	Aircraft stability and control	Coursework
4A7	Aerodynamics	Coursework
4A9	Molecular thermodynamics	Examination
4A10	Flow instability	Examination
4A12	Turbulence and vortex dynamics	Examination
4A13	Combustion and IC engines	Examination
4B19	Renewable electrical power	Examination
4B21	Analogue integrated circuits	Examination
4C7	Random and non-linear vibrations	Coursework and examination

4D13	Architectural engineering	Coursework
4E1	Innovation and strategic management of intellectual property	Coursework
4E3	Business innovation in a digital age	Coursework
4E4	Management of technology	Coursework
4E11	Strategic management	Coursework
4F2	Robust and non-linear systems and control	Examination
4F3	Optimal and predictive control	Examination
4F12	Computer vision	Examination
4I7	Electricity and environment	Examination
4I10	Nuclear reactor engineering	Examination
4I11	Advanced fission and fusion systems	Examination
4M12	Partial differential equations and variational methods	Examination
4M16	Nuclear power engineering	Examination
4M19	Advanced building physics	Coursework
4M20	Robotics	Coursework
4M22	Climate change mitigation	Coursework
5R10	Turbulent reacting flows	Coursework
5R18	Environmental fluid mechanics and air pollution	Coursework
B2	Electrochemical engineering	Examination

### Research requirements

Each candidate must submit a thesis of up to 20,000 words on a subject approved by the Degree Committee.

## Engineering for Sustainable Development for the M.Phil. Degree, 2019–20

The Degree Committee for the Faculty of Engineering gives notice that the modules available to candidates studying the one-year course in Engineering for Sustainable Development for the degree of Master of Philosophy (*Statutes and Ordinances*, p. 525) in the academic year 2019–20 and the form of examination of each module will be as shown below.

The Degree Committee for the Faculty of Engineering may issue amendments to the lists below during the Michaelmas Term 2019, provided that no candidate's preparation for the examination will be affected by the change.

### Inner core modules (mandatory)

*Teaching to take place in Michaelmas Term 2019*

ESD150	Organisational change, values and negotiation	Coursework
--------	---	------------

*Teaching to take place in Lent Term 2020*

ESD200	Sustainability methods and metrics	Coursework
ESDCCP	Client consultancy project	Coursework

### Outer core modules (candidates must take at least two)<sup>1</sup>

*Teaching to take place in Michaelmas Term 2019*

ESD450	Policy, legislation and government	Coursework
ESD650	International development	Coursework

*Teaching to take place in Lent Term 2020*

ESD360	Resilience and hazard mitigation in future cities	Coursework
ESD560	Innovations in sustainable manufacturing	Coursework

### Elective modules

*Teaching to take place in Michaelmas Term 2019*

4B19	Renewable electrical power	Examination <sup>2</sup>
4D13	Architectural engineering	Coursework
4D16	Construction engineering	Examination <sup>2</sup>
4E4	Management of technology	Coursework
4E6	Accounting and finance	Coursework
4M19	Advanced building physics	Coursework
4M22	Climate change mitigation	Coursework
TP1	Technology policy: concepts and frameworks	Coursework
TPE23	Negotiation skills	Coursework

<sup>1</sup> Two modules can be selected from the outer core as elective modules.

<sup>2</sup> All written examinations are of one and a half hours' duration unless otherwise specified.

TPE25 <sup>4</sup>	Strategic valuation uncertainty and real options in system design	Coursework
EP02 <sup>4</sup>	Fundamentals of environmental economics	Coursework
EP08	Comparative environmental politics and policy	Coursework
ESD-A2	Sustainable architecture and urban design	Coursework

*Teaching to take place in Lent Term 2020*

ESD700 <sup>3,5</sup>	Infrastructure design of poor settlements in developing countries	Coursework
4D14	Contaminated land and waste containment	Coursework and examination
4E5	International business	Coursework
4E11	Strategic management	Coursework
4G4	Biomimetics	Coursework
4I7/TEP22	Electricity and environment	Coursework
5R18	Environmental fluid mechanics	Coursework
ETB2 <sup>5</sup>	Renewable energy: wind, wave, tidal and hydro	Coursework
ETB3 <sup>5,6</sup>	Renewable energy: solar and biomass	Coursework
ETB4 <sup>5</sup>	Energy systems and efficiency	Coursework
TP4	Business, government and technology in emerging markets	Coursework
TPE5	Policy, design, and evaluation	Examination (two hours)
TPE20	Management of the innovation process	Coursework
EP06 <sup>4</sup>	Energy and climate change	Examination <sup>2</sup>

### Research requirements

All candidates are required to submit a dissertation of up to 15,000 words on a topic approved by the Degree Committee.

<sup>1</sup> Two modules can be selected from the outer core as elective modules.

<sup>2</sup> All written examinations are of one and a half hours' duration unless otherwise specified.

<sup>3</sup> Subject to numbers.

<sup>4</sup> A cap will be placed of approximately five ESD students per module.

<sup>5</sup> Provisional, and to be confirmed.

<sup>6</sup> Lectures in both Michaelmas and Lent Terms (classed as a Lent module).

<sup>7</sup> Limited places available.

## Industrial Systems, Manufacture and Management for the M.Phil. Degree, 2019–20

The Degree Committee for the Faculty of Engineering gives notice that the modules available to candidates studying the one-year course in Industrial Systems, Manufacture and Management for the degree of Master of Philosophy (*Statutes and Ordinances*, p. 532) in the academic year 2019–20, and the form of examination of each module, will be as shown below.

The Degree Committee for the Faculty of Engineering may issue amendments to the lists below during the Michaelmas Term 2019, provided that no candidate's preparation for the examination will be affected by the change.

### Taught modules (all compulsory)

ISMM1	Manufacturing processes	Coursework
ISMM2	Operations and supply chain management	Coursework
ISMM3	Data and modelling	Coursework
ISMM4	Marketing and new business development	Coursework
ISMM5	Research methods	
4E1	Innovation and strategic management of intellectual property	Coursework
4E4	Management of technology	Coursework
4E5	International business	Coursework

### Projects (all compulsory)

PR1	Industrial project 1	Coursework
PR2	Industrial project 2	Coursework
PR3	Entrepreneurship project	Coursework
PR4	Industrial project 3	Coursework
PR5	Combined essay	Coursework

### Research requirement

All candidates must submit a thesis of not more than 15,000 words on a subject approved by the Degree Committee.

## Machine Learning and Machine Intelligence for the M.Phil. Degree, 2019–20

The Degree Committee for the Faculty of Engineering gives notice that the modules available to candidates studying the one-year course in Machine Learning and Machine Intelligence for the degree of Master of Philosophy (*Statutes and Ordinances*, p. 534) in the academic year 2019–20 and the form of examination of each module will be as shown below.

The Degree Committee for the Faculty of Engineering may issue amendments to the lists below during the Michaelmas Term 2019, provided that no candidate's preparation for the examination will be affected by the change.

### Core modules

MLMI1	Introduction to machine learning ( <i>three-quarters</i> )	Coursework and examination
MLMI2	Speech recognition	Coursework
MLMI4	Advanced machine learning	Coursework
MLMI6	Information theoretic ideas in statistical inference ( <i>half</i> )	Coursework
MLMI7	Reinforcement learning and decision making	Coursework
MLMI11	Designing intelligence interactive systems ( <i>half</i> )	Coursework
MLMI12	Computer vision ( <i>optional</i> )	Coursework
MLMI13	Natural language processing ( <i>optional</i> )	Coursework
4F10	Deep learning and structured data	Examination
4F13	Probabilistic machine learning	Coursework

### Elective modules (candidates must take one)

4F1	Control system design	Coursework and examination
4F2	Robust and nonlinear systems and control	Examination
4F3	An optimisation based approach to control	Examination
4F5	Advanced communications and coding	Examination
4F7	Digital filters and spectrum estimation	Examination
4F8	Image processing and image coding	Examination
4F14	Computer systems	Coursework and examination
4G3	Computational neuroscience	Coursework
4M17	Practical optimisation	Coursework
4M20	Robotics	Coursework
4M21	Software engineering and design	Examination
L18	Automated reasoning	Coursework
L95	Introduction to natural language syntax and parsing	Coursework
R222	Advanced topics in natural language processing	Coursework

Note that not all of the core modules are equally weighted. This is indicated above in the module names.

### Research

All candidates are required to submit a dissertation of up to 15,000 words on a topic approved by the Degree Committee.

## Nuclear Energy for the M.Phil. Degree, 2019–20

The Degree Committee for the Faculty of Engineering gives notice that the modules available to candidates studying the one-year course in Nuclear Energy for the degree of Master of Philosophy (*Statutes and Ordinances*, p. 538) in the academic year 2019–20 and the form of examination of each module will be as shown below.

The Degree Committee for the Faculty of Engineering may issue amendments to the lists below during the Michaelmas Term 2019, provided that no candidate's preparation for the examination will be affected by the change.

### Compulsory core modules

NE1	Reactor physics	Examination
NE2	Reactor engineering and thermal-hydraulics ( <i>double</i> )	Coursework and examination
NE5	Nuclear safety principles and practice ( <i>half</i> )	Coursework and examination
NE6	Nuclear policy	Coursework
NE7	Nuclear practice ( <i>half</i> )	Coursework

### Other core modules (candidates must take at least one)

NE3	Materials for nuclear energy	Examination
NE4	Fuel cycle, waste and decommissioning	Examination
NE8	Computational reactor modelling	Coursework
NE9	Advanced fission and fusion reactor systems	Coursework

**Elective modules**

4A2	Computational fluid dynamics	Coursework
4A3	Turbomachinery I	Coursework and examination
4B19	Renewable electrical power	Examination
4C4	Design methods	Examination
4C5	Design case studies	Coursework
4D7	Concrete structures	Coursework and examination
4D10	Structural steelwork	Coursework and examination
4E4	Management of technology	Coursework
4E5	International business	Coursework
4E6	Accounting and finance	Coursework
4E11	Strategic management	Coursework
4F1	Control system design	Coursework and examination
4F2	Robust and nonlinear systems and control	Examination
4F12	Computer vision	Examination
4I7	Electricity and environment	Coursework
4I8	Medical physics	Examination
4M15	Sustainable energy	Coursework and examination
4M17	Practical optimisation	Coursework
4M18	Present and future energy systems	Examination
ESD560	Innovations in sustainable manufacturing	Coursework
B6	Fluid mechanics and the environment	Examination
TP1	Technology policy	Coursework
TP2	Economic foundations of technology policy	Coursework
TP4	Business, government and technology in emerging markets	Coursework
TP5	Policy design and evaluation	Coursework
TPE20	Management of the innovation process	Coursework
TPE21	Entrepreneurial science and innovation policy	Coursework
TPE23	Negotiation skills	Coursework
TPE24	Competitive strategy in the digital age	Coursework
ESD150	Driving change towards sustainability	Coursework
M3	Extraction and recycling	Examination
M15	Corrosion and protection	Examination
M16	Atomistic materials modelling	Examination
M21	Steels	Examination
PNP	Particle and nuclear physics/comp physics	Examination

Note that some options are half-modules, and one is a double module. This is indicated above in the module names.

**Research**

All candidates are required to submit a dissertation of up to 15,000 words on a topic approved by the Degree Committee.

**Future Infrastructure and Built Environment for the M.Res. Degree, 2019–20**

The Degree Committee for the Faculty of Engineering gives notice that the modules available to candidates studying the one-year course in Future Infrastructure and Built Environment for the degree of Master of Research (*Statutes and Ordinances*, p. 548) in the academic year 2019–20, and the form of examination of each module, will be as shown below.

The Degree Committee for the Faculty of Engineering may issue amendments to the lists below during the Michaelmas Term 2019, provided that no candidate's preparation for the examination will be affected by the change.

**Core modules (all compulsory)**

CM1	Civil engineering theory	Coursework
CM2	Civil engineering research methods	Coursework
CM3	Multi-disciplinarity in civil engineering	Coursework
ETech	Introduction to entrepreneurship	Coursework

**Elective modules (two to be chosen in consultation with the Course Director)**

4C6	Advanced linear vibrations	Coursework and examination
4C7	Random and non-linear vibrations	Coursework and examination
4C9	Continuum mechanics	Examination
4D4	Construction engineering	Coursework
4D5	Foundation engineering	Coursework and examination
4D6	Dynamics in civil engineering	Coursework and examination
4D7	Concrete structures	Coursework and examination
4D9	Offshore geotechnical engineering	Examination
4D10	Structural steelwork	Coursework and examination
4D13	Architectural engineering	Coursework
4F8	Image processing and image coding	Examination
4F12	Computer vision	Examination
4G4	Biomimetics	Coursework
4M12	Partial differential equations and variational methods	Examination
4M16	Nuclear power engineering	Examination
4M17	Practical optimisation	Coursework
4M19	Advanced building physics	Coursework
4M20	Robotics	Coursework
4M22	Climate change mitigation	Coursework
5R5	Advanced experimental methods in geomechanics	Coursework
5R7	Advanced numerical methods in geomechanics	Coursework
5R14	Nonlinear solid mechanics	Coursework
5R19	Earthquake engineering	Coursework
EP10	Climate change policy and land development	Examination

**Research**

All candidates are required to complete a desktop study (DS), a mini-project (MP), a group project (GP), and an M.Res. dissertation of up to 12,000 words on a topic approved by the Degree Committee.

**Future Propulsion and Power for the M.Res. Degree, 2019–20**

The Degree Committee for the Faculty of Engineering gives notice that the modules available to candidates studying the one-year course in Future Propulsion and Power for the degree of Master of Research (formerly Gas Turbine Aerodynamics, *Statutes and Ordinances*, p. 549) in the academic year 2019–20, and the form of examination of each module, will be as shown below.

The Degree Committee for the Faculty of Engineering may issue amendments to the lists below during the Michaelmas Term 2019, provided that no candidate's preparation for the examination will be affected by the change.

**Core modules**

FPP1	Advanced propulsion and power dynamics	Examination
FPP2	Turbomachinery aerodynamic design process	Coursework
FPP3	Experimental methods	Coursework
FPP4	Researcher skills	Coursework

**Elective modules**

4A2	Computational fluid dynamics	Coursework
4A3	Turbomachinery I	Coursework and examination
4A4	Aircraft stability and control	Coursework
4A7	Aerodynamics and design	Coursework
4A9	Molecular thermodynamics	Examination
4B19	Renewable electrical power	Examination
4E4	Management of technology	Coursework
4E6	Accounting and finance	Coursework
4F1	Control system design	Coursework and examination
4F13	Probabilistic machine learning	Coursework
4M17	Practical optimisation	Coursework
4I7	Electricity and environment	Coursework

**Research**

All candidates are required to complete three mini-projects:

MP1	Combustion system aerodynamics
MP2	Compressor performance
MP3	Internal flows and combustor-turbine interaction

All candidates are furthermore required to complete three industry courses:

IC1	Holistic gas turbine design
IC2	Hands-on gas turbine training
IC3	Dyson product design

Finally, all candidates are required to complete a Ph.D. proposal dissertation of up to 12,000 words on a topic approved by the Degree Committee.

**Graphene Technology for the M.Res. Degree, 2019–20**

The Degree Committee for the Faculty of Engineering gives notice that the modules available to candidates studying the one-year course in Graphene Technology for the degree of Master of Research (*Statutes and Ordinances*, p. 549) in the academic year 2019–20, and the form of examination of each module, will be as shown below.

The Degree Committee for the Faculty of Engineering may issue amendments to the lists below during the Michaelmas Term 2019, provided that no candidate's preparation for the examination will be affected by the change.

**Core modules (all compulsory)**

GRM1	Science of graphene, related layered materials and hybrid systems	Examination
GRM2	Technology of graphene, related layered materials and hybrid systems	Examination
GRM3	Flexible and stretchable electronics	Examination
4B26	Advanced devices for high frequency electronics and biosensing	Examination
NT01	Characterisation techniques	Examination
NT04	Nanofabrication techniques	Examination

**Research**

All candidates are required to complete thirty research skills sessions (reference: RSS) and two mini-projects (reference: MP1 and MP2).

The Degree Committee for the Faculty of Engineering may issue amendments to the above lists during the Michaelmas Term 2019, provided that no candidate's preparation for the examination will be affected by the change.

**Connected Electronic and Photonic Systems for the M.Res. Degree, 2019–20**

The Degree Committee for the Faculty of Engineering gives notice that the modules available to candidates studying the one-year course in Connected Electronic and Photonic Systems for the degree of Master of Research (formerly Integrated Photonic and Electronic Systems, *Statutes and Ordinances*, p. 550) in the academic year 2019–20, and the form of examination of each module, will be as shown below.

The Degree Committee for the Faculty of Engineering may issue amendments to the lists below during the Michaelmas Term 2019, provided that no candidate's preparation for the examination will be affected by the change.

**Electronic components and systems**

4B13	Electronic sensors and instrumentation	Examination
4B24	Radio frequency systems	Coursework and examination
4B25	Embedded systems for the internet of things	Coursework
UCLRFC	RF circuits and systems	Coursework and examination

**Photonic components and systems**

4B11	Photonic systems	Examination
4B23	Optical fibre communication	Coursework and examination
UCLAPD	Advanced photonic devices	Examination
UCLOTN	Optical transmission and networks	Examination
UCLPSS	Photonic sub-systems	Examination

**Business**

4E4	Management of technology	Coursework
UCLTBE	Telecommunication business environment	Coursework

**Electives**

4B5	Nanotechnology	Coursework and examination
4B21	Analogue integrated circuits	Examination
4B26	Advanced devices for high frequency electronics and biosensing	Examination
GRM3	Flexible and stretchable electronics	Examination
4F5	Advanced information theory and coding	Examination
4F12	Computer vision	Examination
UCLAML	Applied machine learning	Coursework
UCLBCL	Broadband communications lab	Coursework
UCLBTC	Broadband technologies and components	Examination
UCLEC3	Electronic circuits 3	Coursework
UCLIOT	Internet of things	Coursework
UCLPON	Physics and optics of nano-structure	Coursework and examination
UCLSNS	Software for network services and design	Coursework

The modules beginning ‘UCL’ are provided and examined by University College, London.

**Research**

All candidates are required to complete two project reports (references: MP1 and MP2).

**Sensor Technologies and Applications for the M.Res. Degree, 2019–20**

The Degree Committee for the Faculty of Engineering gives notice that the modules available to candidates studying the one-year course in Sensor Technologies and Applications for the degree of Master of Research (*Statutes and Ordinances*, p. 551) in the academic year 2019–20, and the form of examination of each module, will be as shown below.

The Degree Committee for the Faculty of Engineering may issue amendments to the lists below during the Michaelmas Term 2019, provided that no candidate’s preparation for the examination will be affected by the change.

**Core modules (all compulsory)**

STA1	Principles of sensing	Coursework
STA2	Guided sensor design project	Coursework
ETech	Introduction to entrepreneurship	Coursework

**Elective modules (three to be chosen in consultation with the Course Director)**

BIOPR	Biological physics (principles)	Examination
4B5	Nanotechnology	Coursework and examination
4B11	Photonic systems	Examination
4B13	Electronic sensors and instrumentation	Examination
4B21	Analogue integrated circuits	Examination
4B25	Embedded systems for the internet of things	Coursework
4B26	Advanced devices for high frequency electronics and biosensing	Examination
4C3	Electrical and nano materials	Examination
4E12	Project management	Coursework
4F8	Image processing and image coding	Examination
4F12	Computer vision	Examination
4F13	Probabilistic machine learning	Coursework
4I8	Medical physics	Examination
4M20	Robotics	Coursework
4M22	Climate change migration	Coursework
B5	Optical imaging and microscopy	Examination
C6	Biosensors and bioelectronics	Coursework
C8	Biological physics (techniques)	Examination
GRM3	Flexible and stretchable electronics	Examination
IDP1	Atmospheric chemistry and global change	Examination
MLMI4	Advanced machine learning	Coursework
NT01	Nanotechnology characterisation techniques	Examination
NT08	Bionanotechnology	Examination
R214	Biomedical information processing	Coursework

**Research**

All candidates are required to complete an individual mini-project report (reference: MP1) and a ‘Sensor Team Challenge’ project report (reference: GP1).

**GRACES****Graces submitted to the Regent House on 24 July 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, 2 August 2019.

1. That Dame FIONA REYNOLDS, Master of Emmanuel College, be appointed one of the Septemviri to serve from 1 October 2019 until 31 December 2020.<sup>1</sup>
2. That notwithstanding Regulations 1(d) and 3 of the regulations for the nomination of members of the Council in class (e) (*Statutes and Ordinances*, p. 113), Dr RICHARD ANTHONY, *JE*, be appointed a member of the Nominating Committee from 5 August 2019 until 30 September 2020.<sup>2</sup>
3. That the recommendations in paragraph 8 of the 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 (*Reporter*, 6551, 2018–19, p. 684) be approved.<sup>3</sup>
4. That the recommendations in paragraph 13 of the Joint Report of the Council and the General Board, dated 17 June and 5 June 2019, on the governance of matters for postgraduate and graduate students (*Reporter*, 6553, 2018–19, p. 726), as amended by the Council's Notice dated 22 July 2019 (p. 841) be approved.
5. That the organisational structure of student representation on Faculty Boards and other bodies be amended, as outlined in the General Board's Notice dated 22 July 2019 (p. 846).
6. That, on the recommendation of the General Board, the period in which the General Board is required to act under Special Ordinance C (vii) B. 18(a) in respect of the vacancy in the Professorship of Chemical Engineering be extended until 31 October 2021 or until such earlier date as the Board shall determine after consultation with the Council of the School of Technology and the Chemical Engineering and Biotechnology Syndicate.<sup>4</sup>
7. That in Regulation 9(a) of the regulations for Residence and Precincts of the University (*Statutes and Ordinances*, p. 175) the text in parentheses be amended to read '(having followed a one-year course of study prescribed by Ordinance)'.<sup>5</sup>
8. That Regulations 1, 2, 4, 5 and 7 of the regulations for the El-Erian Fund for Economics (*Statutes and Ordinances*, p. 829) be revised to read as follows:<sup>6</sup>
  1. The funds received from the Board of Cambridge in America representing a benefaction from Mohamed El-Erian together with such other sums as may be received or allocated for the same purpose, shall form a Fund called the El-Erian Fund for Economics and Policy.
  2. The Managers shall be responsible for the administration of the Fund and the application of its expendable capital and income and shall comprise:
    - (a) the Head of the School of the Humanities and Social Science or a duly appointed deputy (who shall be Chair);
    - (b) another member of the School of the Humanities and Social Sciences, appointed by the Council of the School for such period as the Council of the School shall determine;

<sup>1</sup> This appointment is being proposed to fill a casual vacancy.

<sup>2</sup> There is an unexpected vacancy in the external membership of the Council from 1 January 2020. The process to identify a candidate to serve as an external Council member will start over the summer, so that a Grace making a nomination can be published in the Michaelmas Term 2019. The approval of Grace 3 of 10 July 2019 has enabled the current membership to remain in place once a search for a candidate has commenced. There are two unfilled vacancies in class (d) of the Nominating Committee (members of the Senate elected by the Regent House) from 1 October 2019 following two elections and Professor Dame Carol Black, whose term ends on 30 September 2019, is planning to step down on 31 July 2019. It is therefore proposed that Dr Richard Anthony be appointed to one of the vacancies in class (d). An election to fill the remaining vacancy will be held in the Michaelmas Term 2019.

<sup>3</sup> See the Council's Notice, p. 840.

<sup>4</sup> *Statutes and Ordinances*, p. 718. See the General Board's Notice on p. 849.

<sup>5</sup> The Council is proposing this change to reflect the changes made to the Regulations for the degree of Master of Business Administration with effect from 1 October 2017 (*Reporter*, 6475, 2016–17, p. 783).

<sup>6</sup> The Council, on the recommendation of the Council of the School of the Humanities and Social Sciences and with the support of the donor, is proposing these changes to amend the title of the Fund and the Professorship to reflect more closely the research conducted in the El-Erian Institute of Human Behaviour and Economic Policy, amend the membership to include a second member of the School, and to place the El-Erian Institute under the auspices of the School.

- (c) the El-Erian Professor (or, in the event the Professorship is vacant, another individual appointed by the Vice-Chancellor for such period as the Vice-Chancellor shall determine);
- (d) a member appointed by the Governing Body of Queens' College for such period as the Governing Body of Queens' College shall determine; and
- (e) an external member appointed by the Vice-Chancellor for such period as the Vice-Chancellor shall determine.

4. Subject to the arrangements specified by Cambridge in America at the time of receipt for the period ending on 15 August 2019 the income from the permanent endowment of the Fund shall be used to support research into human behaviour and economic policy through:

- (a) the payment of the stipend, national insurance, pension contributions, and associated indirect costs of an El-Erian Professorship of Behavioural Economics and Policy by the University and funding for the research activities of the Professor as determined by the Managers;
- (b) a distribution of 4.95% of the income from the permanent endowment of the Fund to Queens' College in each financial year in support of a linked Fellowship for the holder of the Professorship (or, in the event that the Fellowship is vacant, an equivalent payment to the College in support of teaching in economics); and
- (c) a distribution of 45.45% of the income from the permanent endowment of the Fund to Queens' College in each financial year in support of Studentships for doctoral research students in the School of the Humanities and Social Sciences, to be administered by the Governing Body of Queens' College.

5. The income and (if the Managers think fit) the capital of the Fund not held as permanent endowment shall be used as follows:

- (a) the funds so specified by Cambridge in America at the time of receipt shall be used for the support of research in human behaviour and economic policy through the foundation of an El-Erian Institute of Human Behaviour and Economic Policy which may include the funding of research, postdoctoral research fellowships and doctoral studentships, visitor programmes, and conferences and the support of research in human behaviour and economic policy in such manner as the Managers shall determine, provided that, if the Managers are satisfied that surplus funds are available, such surplus may be applied as an accretion to the funds held in accordance with Regulation 4(a); and
- (b) the funds so specified by Cambridge in America at the time of receipt shall be distributed to Queens' College for the support of outreach activities for the El-Erian Institute of Human Behaviour and Economic Policy which may include the funding of research, postdoctoral research fellowships and doctoral studentships, visitor programmes and conferences, and the support of research in human behaviour and economic policy in such manner as Queens' College shall determine.

7. The El-Erian Professor shall be elected in accordance with Special Ordinance C (vii) B.1(c)(iii), provided that, on the occasion of an election to the Professorship, the General Board shall invite the Governing Body of Queens' College to nominate a representative to receive papers and to attend meetings relating to the election, including the meeting of the Board of Electors as a nonvoting observer.

9. That Regulation 2(c) of the regulations for the Clive Parry International Law Prize Fund (*Statutes and Ordinances*, p. 926) be deleted.<sup>7</sup>

10. That Regulation 3 of the regulations for the Ver Heyden de Lancey Fund (*Statutes and Ordinances*, p. 999) be amended to read as follows:<sup>8</sup>

3. The income of the Fund may be used, at the discretion of the Managers, to promote medico-legal studies in the University in memory of the Baron Ver Heyden de Lancey. Permitted expenditure shall include providing public lectures on medico-legal subjects (to be known as Baron de Lancey Lectures), providing scholarships or prizes (to be known as Baron de Lancey Scholarships or Prizes), and making grants (to be known as Baron de Lancey Grants) in the area of medico-legal studies within the University of Cambridge.

<sup>7</sup> The Council, on the recommendation of the General Board and the Faculty Board of Law, is proposing the removal of a prize for graduates from outside the British Isles with a linguistic disadvantage, which was established before the introduction of language tests for admission and is therefore now rarely awarded. The income will continue to be applied to the two remaining Prizes supported by the Fund.

<sup>8</sup> The Council, on the recommendation of the General Board and the Faculty Board of Law and with the support of the donor, is proposing these changes under Statute E I 8 to enable scholarships, prizes and grants to be awarded from the surplus income of the Fund.

**11.** That in the following regulations, the reference to the Pro-Vice-Chancellor (Planning and Resources) be amended to refer to the Pro-Vice-Chancellor with responsibility for planning:<sup>9</sup>

Regulation 1 of the regulations for the Joint Committee on Development (*Statutes and Ordinances*, p. 132)  
Regulation 2 of the regulations for the Vice-Chancellor's Endowment Fund (*Statutes and Ordinances*, p. 1000)

<sup>9</sup> The Council is proposing these changes to revise outdated references.

## ACTA

### **Approval of Graces submitted to the Regent House on 10 July 2019**

The Graces submitted to the Regent House on 10 July 2019 (*Reporter*, 6555, 2018–19, p. 808) were approved at 4 p.m. on Friday, 19 July 2019.

### **Congregation of the Regent House on 19 July 2019**

A Congregation of the Regent House was held at 10 a.m. All the Graces that were submitted to the Regent House (*Reporter*, 6556, 2018–19, p. 828) were approved.

The following degrees were conferred:

*This content has been removed as it contains personal information.*

### **Congregation of the Regent House on 20 July 2019**

A Congregation of the Regent House was held at 10 a.m. All the Graces that were submitted to the Regent House (*Reporter*, 6556, 2018–19, p. 829) were approved.

The following degrees were conferred:

*This content has been removed as it contains personal information.*

*This content has been removed as it contains personal information.*

E. M. C. RAMPTON, *Registrar*

**END OF THE OFFICIAL PART OF THE 'REPORTER'**

## COLLEGE NOTICES

### Elections

#### *Fitzwilliam College*

Elected as Master of Fitzwilliam with effect from 1 October 2019:

Baroness Morgan of Huyton (Sally), M.A., *Cambridge*

Elected to a Fellowship in Class A, with effect from 1 October 2019:

Christelle Abadie, D.Phil., *Oxford*

Jean-Michelle Johnston, B.A., D.Phil., M.St., *Oxford*

Stevie Martin, B.A., LL.B., *Griffith Australia*, LL.M., *TH*

Céline Vidal, B.Sc., M.Sc., *Ecole Supérieure de Chimie de Lille*, Ph.D., *Paris-Sorbonne*

Sarah Kolopp, M.A., *École des Hautes Études en Sciences Sociales*, Ph.D., *École normale supérieure de Paris*

Olenka Pevny, M.A., Ph.D., *New York*

Elected to a Research Fellowship in Class C, with effect from 1 October 2019:

Cléo Chassonnery-Zaïgouche, M.A., Ph.D., *Paris-Sorbonne*

Elected to a Fellowship in Class E, with effect from 1 October 2019:

Kenneth Platts, M.A., Ph.D., *JE*

Nicola Padfield, M.A., *Oxford*, D.E.S., *Aix-Marseille*

Elected as an 1869 Fellow Benefactor:

Lady Olisa (Julia), B.Ed., *N*, M.A., *London*

### Vacancies

*Christ's College*: Stipendiary Junior Research Fellowship in a specified area of Arts, Humanities and Social Sciences; tenure: four years, non-renewable; closing date: 24 October 2019 at 12 noon; further details: <http://www.christs.cam.ac.uk/jrf>

*Jesus College*: Research Fellowships in Arts (two posts) and Science (one post); tenure: three years, fixed term, as from 1 October 2020; salary: starting from £22,017, plus subsidised housing and meals; closing date: 27 August 2019; further details: <http://www.jesus.cam.ac.uk/fellows-staff/vacancies/> (details and online application form available from 29 July 2019)

*Queens' College*: Junior Research Fellowships in Geography, in English, and in any subject (the latter open to Queens' members only); to commence on 1 October 2020; stipend: starting at £22,659 plus benefits; closing date: 16 September 2019 at 12 noon; further details: <http://www.queens.cam.ac.uk/general-information/vacancies>

*Trinity Hall*: Postdoctoral Research Associateships (up to ten posts); tenure: usually two years, as from October 2019, and co-terminous with postdoctoral employment; benefits: the normal privileges and facilities of the College that are available to graduate students, with certain limited exceptions; a small annual fee is payable; closing date: 2 September 2019; further details: <http://www.trinhall.cam.ac.uk/about/vacancies>

### Awards and Prizes

*Queens' College*: A list of distinctions and prizes awarded for the 2018–19 academic year is available on the Queens' College website at <https://www.queens.cam.ac.uk/teaching-learning/distinctions-awards/college-prizes-and-awards/prizes-2019>

### Memorial Services

#### *Trinity College*

##### Memorial Service for Sir Michael Atiyah

A Memorial Service will be held for Sir Michael Atiyah, Fellow of Trinity College (see *Reporter*, 6539, 2018–19, p. 426), in the College Chapel on Saturday, 26 October 2019 at 2.30 p.m. Anyone wishing to attend is asked to register at: <https://www.trin.cam.ac.uk/events/memorial-service-for-Sir-Michael-Atiyah/>

## EXTERNAL NOTICES

### Oxford Notices

*Las Casas Institute, Blackfriars Hall*: Junior Research Fellow in Economics as a Moral Science (part-time); tenure: from 15 January 2020; salary: £27,383 *pro rata* (0.5 FTE); closing date: 5 September 2019 at 12 noon; further details: <https://www.bfriars.ox.ac.uk/community-life/vacancies/>

*Christ Church*: The thirteenth annual Andrew Chamblin Memorial Concert will be given by Mr David Titterington HonFRCO HonRAM at 8 p.m. on 19 September 2019, in Christ Church Cathedral, Oxford, and will feature organ works by Bach, Muffat, Scheidemann, Wesley and Ritter; admission free, everyone welcome; no tickets required and no reserved seating; further information: <https://www.chch.ox.ac.uk/events/cathedral/andrew-chamblin-memorial-concert-2019>

*Lady Margaret Hall*: Director of Chapel Music (part-time); closing date: 5 August 2019 at 12 noon; further details: <https://www.lmh.ox.ac.uk/about-lmh/jobs/director-chapel-music-part-time>

### Woolf Institute

Operations Assistant (part-time), supporting research and outreach at the institute; salary: £30,000–£35,000; closing date: 21 August 2019 at 11.59 p.m.; further details: <https://www.woolf.cam.ac.uk/about/vacancies/operations-assistant>