REPORTER

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NOTICES

Calendar

- 30 July, Friday. Congregation of the Regent House at 10 a.m.
- 31 July, Saturday. Congregation of the Regent House at 10 a.m.
- 10 September, Friday. Congregation of the Regent House at 10 a.m. Scarlet Day.
- 11 September, Saturday. Congregation of the Regent House at 10 a.m. Scarlet Day.
- 17 September, Friday. Congregation of the Regent House at 10 a.m.
- 18 September, Saturday. Congregation of the Regent House at 10 a.m.
- 1 October, *Friday*. Michaelmas Term begins. Congregation of the Regent House at 9.55 a.m.: Election and admission of the Proctors (see below). Annual address by the Vice-Chancellor (see below).
- 5 October, Tuesday. Full Term begins.

This is the last ordinary issue of the *Reporter* for the 2020–21 academic year. The first ordinary issue of the 2021–22 academic year is due for publication on Wednesday, 29 September 2021.

Discussion on Tuesday, 12 October 2021

The Vice-Chancellor invites members of the Regent House, University and College employees, registered students and others qualified under the regulations for Discussions (*Statutes and Ordinances*, p. 105 as amended by Grace 2 of 28 April 2021) to a Discussion on Tuesday, 12 October 2021 at 2 p.m. The following Reports will be discussed:

- 1. Report of the General Board, dated 22 July 2021, on major modifications to the Education Tripos (p. 806).
- 2. Report of the General Board, dated 22 July 2021, on the introduction of a Design Tripos and Master of Design Degree in the Faculty of Architecture and History of Art (p. 810).

Arrangements for the Discussion will be confirmed early in the Michaelmas Term. Contributors unable to attend may email their remarks to contact@proctors.cam.ac.uk (copying in ReporterEditor@admin.cam.ac.uk) by no later than 10 a.m. on the day of the Discussion for reading out by the Proctors, or ask someone else who is attending to read the remarks on their behalf.

¹ Any comments sent by email should please begin with the name and title of the contributor as they wish it to be read out and include at the start a note of any College or Departmental affiliations held.

Congregation of the Regent House for the election and admission of the Proctors, 1 October 2021

The Vice-Chancellor gives notice that the election of the Proctors and their Deputies for 2021–22 required by Statute C IV and the Special Ordinance made under it, will take place in the Senate-House at 10 a.m. on Friday, 1 October 2021. A Congregation is called for 9.55 a.m.

Dr John Fawcett and The Revd Dr Mark Smith have been nominated for election as Proctor by Churchill College and Clare College respectively, and the Heads of those Colleges have certified that their nominees have kept residence. The retiring Proctors for 2020–21, Dr Karen Ottewell, of Emmanuel College, and Dr Annamaria Motrescu-Mayes of Clare Hall, have been nominated by Drs Fawcett and Smith for election as their Deputies, as have Mr Gordon Chesterman, of St Edmund's College and Dr Cristiano Ristuccia of Trinity Hall. Having been elected by Grace during Easter Term on the nomination of Girton College and Pembroke College respectively, Dr Sebastian Falk and Dr Mark Purcell are due to be admitted to office as the Pro-Proctors for 2021–22. The Congregation will then be dissolved.

Members of the Regent House and other members of the University community wishing to attend for this business are requested to be seated by 9.50 a.m. Black gowns are worn (hoods are not required other than by official participants). All attendees should please comply with any University guidelines on distancing or the wearing of face-coverings that are current at that time. Any further details will be published in late September and there will be no reception after the Congregation.

Annual address by the Vice-Chancellor, 1 October 2021

The Vice-Chancellor's annual address to the University will not occur in conjunction with the election and admission of the Proctors and their Deputies, but will be delivered separately and filmed for transmission. The text will be published in the *Reporter* as usual.

Joint Report of the Council and the General Board on the discontinuation of the public display of class-lists and other matters: Notice in response to Discussion remarks

22 July 2021

The Council has received the remarks made on the above Report at the Discussion on 6 July 2021 (*Reporter*, 2020–21: 6623, p. 715; 6626, p. 763). It has consulted with the General Board in preparing this response.

Dr Rutter expresses concern that the high opt-out rate might indicate an underlying issue. There is already evidence of the issues. Students at previous Discussions on this topic have spoken of the impact of the open publication of their examination results on their confidence and wellbeing (*Reporter*, 6430, 2015–16, p. 651). The Students' Union, in the resolution on class-lists referred to in the Report, states that class-lists 'promote an unhealthy culture of competition and encourage students to focus on their academic success relative to others'. The Report notes the higher proportion of female students who have used the opt-out.

Professor Evans is concerned about the consequences of the proposals for keeping the record, given that class-lists are held in a number of locations. The Report's recommendations make no changes to the current position, as set out in Regulation 3 of the Ordinance on the Publication of Lists of Successful Candidates in Examinations, which is that each class-list signed by the Examiners and received by the Registrary is to be 'preserved in the Registry as the authoritative list'. Those lists are the ones against which all others are verified, including the data in CamSIS. The Council believes that those who have taught individual students have a legitimate interest in the examination results of those students and that Colleges, Departments and Faculties take seriously the confidentiality of the data.

Both Dr Rutter and Mr Humbles query whether there is an alternative to the current opt-out scheme that might be acceptable. The existing scheme, with students being asked whether they wish to opt out before their examination results are known, was adopted as the best method, bearing in mind the processing required to distribute class-lists using existing systems to tight deadlines. Instead of investing additional resource in providing an alternative, which might not result in any better take-up rate, the Council and the General Board are recommending that this practice should cease.

Dr Sewell suggests that the students who have not opted out of publication should be allowed to continue to have their results published. The Council has no objection to students publishing their own examination results; its proposals concern the University being expected to do so on their behalf. There will still be the opportunity for students to celebrate their achievements and to decide with whom they wish to share their results. The class-lists currently published in the *Reporter* are only available to those with Raven access and are not always complete, therefore their use as a deterrent to misrepresentation is already likely to be limited. Stepping back to consider whether a service is still valued and whether it is worthwhile continuing to provide resources to support it is good practice.

The Council is submitting a Grace (Grace 2, p. 815) for the approval of the recommendations of the Report.

Cambridge Children's Research Institute

22 July 2021

A new University research institute, the Cambridge Children's Research Institute (CCRI), is planned as part of the new NHS Cambridge Children's Hospital development. Led by Cambridge University Hospitals NHS Foundation Trust (CUHFT), Cambridgeshire and Peterborough NHS Foundation Trust (CPFT) and the University of Cambridge, the Cambridge Children's Hospital is expected to be delivered in 2025. The Cambridge Children's Hospital will address a national mental health crisis in the UK and provide specialist care for children and young people in East Anglia.

The CCRI, which will be embedded within the Cambridge Children's Hospital, aims to transform healthcare for children and young people through research to understand the links between physical and mental health; genetic and early life environmental factors that preventably predispose to a life-long trajectory of illness; and young people's health in a family, social and educational context, to improve healthcare and research standards for children and young people regionally, nationally and internationally.

The CCRI will comprise approximately 5,000m² within an overall hospital footprint of approximately 30,000m². The new hospital will be located on land previously identified for hospital expansion, which benefits from outline planning permission, opposite the Rosie Hospital on the Cambridge Biomedical Campus. The majority of funding for the clinical accommodation will be provided by the government and the two NHS Trusts involved. A proportion of the funding for the clinical accommodation, and all the funding for the CCRI accommodation, is expected to be raised from philanthropic and other external sources.

The CCRI accommodation within Cambridge Children's Hospital will be leased to the University and will therefore constitute University space for the period of the lease. An agreement for lease and other relevant property agreements pertaining to the University's interest in the project will be developed as part of the further development of the project. Subject to approval of the Concept and Full Cases for the CCRI by the Planning and Resources Committee, approval for implementation of the project will be sought by Grace of the Regent House in due course.

CUHFT, as the developer of the Cambridge Children's Hospital, is expected to submit a planning application for the scheme to the Local Planning Authorities in autumn 2021.

Statutes approved: Titles and structure of academic offices

22 July 2021

The Registrary has received notice from the Clerk of the Privy Council that Her Majesty the Queen, at a Council held on 21 July 2021, was pleased to approve new Statute C XIV and amendments to Statutes A IV, A X, C XII, C XIII and E I, which were submitted by the University in accordance with Grace 5 of 29 July 2020 following a ballot. The changes implement a new structure of academic offices and new titles with effect from 1 October 2021.

Sidgwick Lecture Block

22 July 2021

The following Notice is published to advise the University of works which are not considered to be a 'substantial alteration' within the meaning of Statute F II 3 and therefore do not require a Report but are nevertheless of interest or consequence to members of the Regent House (*Reporter*, 6259, 2011–12, p. 498).

Built in 1959, the Sidgwick Lecture Block is one of the University's principal teaching hubs, used by many Faculties and Departments and for examinations. Anecdotal evidence of the building's poor condition has been supplemented by an objective assessment made as part of the Sidgwick Site masterplan; measurement of the building's performance against a functional standard and performance specification defined by the Programme Board for Education Space; and a recent condition survey undertaken by the Estates Division. These assessments found the building to be in very poor condition and below the functional standard required for education space in the University.

The Planning and Resources Committee has accepted the need for substantial investment to make this building fit for purpose, to be phased over several years. The Committee has agreed that an initial project to undertake the most urgent remedial work can be undertaken now. The substantive works are programmed for completion by the end of December 2021, with overall completion by 31 January 2022, so that the building may reopen to students and staff in Lent Term 2022. The budget for this work is £9.274m, to be met from the PRC's Investment Fund (former Capital Fund) and the Building Maintenance Fund. The Programme Board for Education Space will issue further communications on these works shortly.

Membership of the Regent House for retired University staff: 15 August deadline

Under Special Ordinance A (i) (e), retired members of University staff who were previously on the Roll can reacquire Regent House membership. To qualify, University staff:

- will have retired or be about to retire from an office or appointment in the University which previously qualified them for membership of the Regent House; and
- will not be eligible for membership of the Regent House in another category, e.g. as a Fellow of a College; and
- will need to provide to the Registrary by 15 August prior to the promulgation of the Roll each year written confirmation from their Head of institution that they are active participants in the University's affairs.

A form is available at: https://www.governance.cam.ac.uk/governance/key-bodies/RH-Senate/Documents/RHmembershipforUnivstaff.pdf, for return to the Registrary by email to UniversityDraftsman@admin.cam.ac.uk by Sunday, 15 August 2021, for inclusion on the Roll from 5 November 2021.

VACANCIES, APPOINTMENTS, ETC.

Elections, appointments and grants of title

The following elections, appointments and grants of title have been made:

ELECTIONS

Professor Sean Hartnoll, M.A., Ph.D., *JN*, Associate Professor, Stanford University, elected Professor of Mathematical Physics (1967) with effect from 1 October 2021.

Professor Peter Newman Golder, B.S., *Pennsylvania*, Ph.D., *California*, *Los Angeles*, Professor of Marketing, Tuck School of Business, Faculty Director, TuckGO and Academic Fellow, Marketing Institute, Dartmouth College, Hanover, USA, elected Sandra Dawson Visiting Professor of Marketing, Strategy and Innovation, from 8 June 2021 until 26 June 2021, assigned to the Judge Business School.

APPOINTMENTS

University Senior Lecturer¹

Biochemistry. Dr Philip Zegerman, M.A., Ph.D., CL, appointed from 1 July 2021 until the retiring age and subject to a probationary period of five years.

University Lecturers1

Archaeology. Dr Jonathan Stuart Tenney, B.A., *Pennsylvania*, M.A., Ph.D., *Chicago*, appointed from 1 July 2021 until the retiring age and subject to a probationary period of five years. Dr Alastair John Masters Key, B.Sc., M.Sc., Ph.D., P.G.C.H.E., *Kent*, appointed from 14 September 2021 until the retiring age and subject to a probationary period of five years.

Chemistry. Dr Robert James Phipps, Ph.D., ED, M.Sc., London, appointed from 1 October 2021 until the retiring age.

East Asian Studies. Dr Xia Zhao, M.A., East China, M.Phil., Ph.D., N, appointed from 1 September 2021 until the retiring age and subject to a probationary period of five years.

Engineering. David Krueger, B.A., Reed College, USA, M.Sc., Montreal, appointed from 1 June 2021 until the retiring age and subject to a probationary period of five years.

History. Dr Michael Peter Ian Joseph, B.A., M.Sc., D.Phil., Oxford, appointed from 1 October 2021 until the retiring age and subject to a probationary period of five years.

Law. Dr Emilija Leinarte, LL.M., LC, Ph.D., T, LL.B., Mykolas Romeris, Lithuania, LL.M., Texas, appointed from 1 October 2021 until the retiring age and subject to a probationary period of five years.

Politics and International Studies. Dr Steven Michael Ward, B.A., Tufts, USA, M.A., Ph.D., Georgetown, USA, appointed from 1 July 2021 until the retiring age and subject to a probationary period of five years.

Pure Mathematics and Mathematical Statistics. Dr Sourav Sarkar, B.Stat., M.Stat., Indian Statistical Institute, Kolkata, Ph.D., California, Berkeley, appointed from 1 July 2021 until the retiring age and subject to a probationary period of five years.

Social Anthropology. Dr Liana Cheng Lian Chua, M.Phil., Ph.D., F, B.A., Oxford, appointed from 1 September 2021 until the retiring age and subject to a probationary period of five years. Dr Iza Kavedzija, Dip.Soc.Anth., Zagreb, M.Sc., D.Phil., Oxford, appointed from 1 September 2021 until the retiring age and subject to a probationary period of three years.

Director

University Offices (Human Resources Division). Ms Andrea Louise Elsie Hudson, appointed from 1 July 2021 until the retiring age and subject to a probationary period of nine months.

Senior Assistant Treasurer

University Offices (Finance Division). Ms Michelle Barbara Bond, B.Sc., Wales, appointed from 10 May 2021 until the retiring age.

Senior Assistant Registrary

University Offices (Health, Safety and Regulated Facilities Division). Ms Margaret Gentry, B.Sc., Anglia Ruskin, appointed from 5 May 2021 until the retiring age and subject to a probationary period of nine months.

GRANTS OF TITLE

Affiliated Lecturers

Biology. Dr Andrea Greve has been granted the title of Affiliated Lecturer from 1 October 2021 to 30 September 2023. Professor Johannus Jan Bolhuis, Dr Thomas David Kay Brown, Dr Georgina E. Browne, Dr Peter David Carey, Dr Alexander David Clarke, CL, Dr Karen Lipkow, CL, Professor Jonathan Andrew Napier, Dr Colin Adrian Roberts, SID, Ms Anita May Shelley, Dr Debra Ann Spencer, LC, Dr Andrew Charles Gladwyn Thwaites, PEM, and Dr Emma Woodberry have been granted the title of Affiliated Lecturer from 1 October 2021 for a further two years. Dr Hana D'Souza and Dr Sharon Morein-Zamir have been granted the title of Affiliated Lecturer from 1 November 2021 for a further two years. Dr Sarah Louise Lloyd-Fox and Mr Thomas Santarius have been granted the title of Affiliated Lecturer from 1 December 2021 for a further two years. Dr Michael Harfoot has been granted the title of Affiliated Lecturer from 1 October 2022 for a further year.

¹ From 1 October 2021 the titles and structure of academic offices in the University will change; the offices of University Senior Lecturer and of University Lecturer (pre-probation) will be replaced with those of Associate Professor (Grade 10) and Assistant Professor respectively (see p. 787 and *Reporter*, 2020–21, 6601, p. 279).

Computer Science and Technology. Dr Mark Gotham, CHU, Dr Roman Kolcun, Ms Mariana-Christina Marasoiu, Dr Challenger Mishra, Dr Petar Velickovic and Dr Ali Ozgur Yontem have been granted the title of Affiliated Lecturer from 1 October 2021 until 30 September 2022. Dr Andrew Paul Caines, CAI, Dr Luke Church, CHU, Dr Richard Neil Clayton, DAR, Dr Jennifer Cobbe, Dr Guy Edward Emerson, CAI, Dr Timothy Lawrence Harris, CHU, Dr Steven John Herbert, CHU, Dr Heleen Louise Janssen, Dr Martin Alexander Kleppman, CC, Mr Jack Lang, EM, Dr Marwa Mohammed Adel Mahmoud-Anis, K, Dr Steward Alastair McTavish and Dr Advait Sarkar have been granted the title of Affiliated Lecturer from 1 October 2021 for a further year. Dr Jatinder Singh has been granted the title of Affiliated Lecturer from 1 January 2022 for a further year.

Human, Social and Political Science. Dr Chloe Nahum-Claudell, PEM, has been granted the title of Affiliated Lecturer from 1 October 2021 until 30 September 2022. Dr Kelly Fagan Robinson, CLH, has been granted the title of Affiliated Lecturer from 1 October 2021 until 30 September 2023. Ms Camille Michele Helene Lardy, EM, and Dr Peter Alexander Lockwood, DAR, have been granted the title of Affiliated Lecturer from 1 October 2021 for a further year. Dr Eona Bell, SE, Dr Hildegard Diemberger, PEM, and Dr Paola Filippucci, MUR, have been granted the title of Affiliated Lecturer from 1 October 2021 for a further two years.

Music. Dr Mine Dogantan-Dack has been granted the title of Affiliated Lecturer from 1 October 2021 until 30 September 2023. Dr Delphine Melissa Mordey, *N*, has been granted the title of Affiliated Lecturer from 1 April 2021 for a further period until 30 September 2022. Professor Margaret Faultless, *G*, Dr David Glenn Skinner, *SID*, Mr Jeremy Robert Yarker Thurlow, *R*, and Dr Edward Wickham, *CTH*, have been granted the title of Affiliated Lecturer from 1 October 2021 for a further two years.

Vacancies in the University

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

Professorship of Cardiovascular Ageing in the Department of Public Health and Primary Care: closing date: 17 September 2021; further details: https://www.wittkieffer.com/position/professor-of-cardiovascular-ageing/ and https://www.jobs.cam.ac.uk/job/30754/; quote reference: RH27543

Moran Professorship of Conservation and Development in the Department of Geography: informal enquiries: Professor Bhaskar Vira, Head of Department and Convenor of the Board of Electors (email: hod@geog.cam.ac.uk); start date: from 1 January 2022 or as soon as possible thereafter; closing date: 15 October 2021; further details: https://www.jobs.cam.ac.uk/job/30620/; quote reference: LC27428

Cavendish Professorship of Physics in the Department of Physics: informal enquiries: Professor Andy Parker, Head of Department and Convenor of the Board of Electors (email: hod@phy.cam.ac.uk); closing date: 30 August 2021; further details: https://www.jobs.cam.ac.uk/job/30713/; quote reference: KA27509

Ray Dolby Professorship of Theoretical and Experimental Physics in the Department of Physics: informal enquiries: Professor Andy Parker, Head of Department and Convenor of the Board of Electors (email: hod@phy.cam.ac.uk); start date: as soon as possible; closing date: 2 September 2021; further details: https://www.jobs.cam.ac.uk/job/30714/; quote reference: KA27510

Professorship of Plant Development in the Sainsbury Laboratory: informal enquiries: Professor Henrik Jönsson, Director of the Sainsbury Laboratory and Convenor of the Board of Electors (email: henrik.jonsson@slcu.cam.ac.uk); start date: as soon as possible; closing date: 15 September 2021; further details: https://www.jobs.cam.ac.uk/job/30781/; quote reference: PT27569

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

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

NOTICES BY THE GENERAL BOARD

Examinations and assessment, 2021–22: Updates to the Framework for Assessment

28 July 2021

The General Board has updated its Framework for Assessment for Undergraduate and Postgraduate Taught Programmes in 2021–22, issued in May 2021 (*Reporter*, 6618, 2020–21, p. 661), following feedback from Departments and Faculties. The two main changes are:

- (a) to keep the option of the 24-hour window, as one of the fixed windows for completion of an online examination, and work with Faculties and Departments that choose this option to prepare students for this mode of assessment; and
- (b) to include the option of a five-hour open book online examination with a word limit, and with additional time for students with disabilities.

The revised Framework is available online at: https://www.admin.cam.ac.uk/reporter/2020-21/weekly/6628/RevisedAssessmentFramework-July2021.pdf.

Residence requirements for the M.Phil. Degree by thesis and by advanced study

With effect from 1 October 2021

The General Board has considered the need for greater flexibility in residence requirements for candidates for the M.Phil. Degree by thesis and by advanced study, to take account of courses where time away from Cambridge is a mandatory or expected part of the course. The Board has approved changes to the General Board Regulations for these degrees, set out below, to allow exemptions to the requirement to keep three terms of residence on restricted grounds approved by the Board.

By amending Regulation 1(b) of the General Regulations for the degrees of Doctor of Philosophy, Master of Science, Master of Letters and Master of Philosophy by Thesis (*Statutes and Ordinances*, p. 501) to read as follows:

(b) The General Board, after considering a recommendation by the Degree Committee concerned, may allow a student for the Ph.D., M.Sc., or M.Litt. Degree to spend all but three terms of her or his full-time course of research or six terms of a part-time course of research as a candidate for a degree, or any lesser number of terms, working under supervision outside the University under conditions approved by the Degree Committee and the General Board. The General Board, after considering a recommendation by the Degree Committee concerned, may allow a student for the M.Phil. Degree to spend part of one term of her or his full-time course of research or up to two terms of her or his part-time course of research as a candidate for a degree, working under supervision outside the University under conditions approved by the Degree Committee and the General Board.

By adding a new sentence at the end of Regulation 8 of the General Regulations for the degree of Master of Philosophy by Advanced Study (*Statutes and Ordinances*, p. 512) to read as follows:

The General Board, after considering a recommendation by the Degree Committee concerned, may allow a student for the M.Phil. Degree under Route A to spend part of one term of her or his full-time course working under supervision outside the University under conditions approved by the Degree Committee and the General Board.

Changes to substitute teaching rates

With effect from 1 October 2021

The General Board has approved changes to the substitute teaching rates, following a review of payments made to those undertaking lectures or seminars and providing support to students during lectures, practicals or time in the laboratory or studio. The changes are outlined below:

- The substitute teaching rate for delivering lectures and seminars will be aligned to the bottom point of Grade 7 (point 39 on the single salary spine).
- Preparation time for substitute teaching will be recognised at the rate of 4 hours per 1-hour lecture and 1.5 hours per 1-hour seminar.
- The rates of pay for the unestablished role of Demonstrator have been rationalised from the current lower, intermediate and higher rates to reflect the new role profile titles of Demonstrator and Senior Demonstrator.
- The rate of pay for Demonstrators will be aligned to Grade 5 (point 34 of the single salary spine) and for Senior Demonstrators will be Grade 6 (point 37 of the single salary spine).
- Where individuals are required to attend training or meetings at the request of the University, this will be paid at the basic hourly rate for their roles.

The new substitute teaching rates can be found at: https://www.hr.admin.cam.ac.uk/forms/form-stf (Raven required).

Membership of the Faculty Board of Clinical Medicine

The General Board, on the recommendation of the Faculty Board of Clinical Medicine, has approved a change to class (e) of membership of the Faculty Board of Clinical Medicine. Schedules I and III of the General Regulations for the constitution of the Faculty Boards (Statutes and Ordinances, p. 608) have been amended, to increase the number of members in class (e) to 18, and to include the Head of each Institute/Unit recognised by the Council of the School within the School of Clinical Medicine among the holders of specified offices, respectively. The Unit and Institute Heads and Directors that would be included are for the following institutions: the Cambridge Institute for Medical Research; the Cancer Research UK Cambridge Institute; the MRC Biostatistics Unit; the MRC Cancer Unit; the MRC Cognition and Brain Sciences Unit; the MRC Epidemiology Unit; and the MRC Mitochondrial Biology Unit.

University affiliation for clinical placement providers

The General Board has approved the principle that University affiliation may be granted to clinical placement providers, and that there should be two levels of affiliation, depending on the level of contribution and commitment to providing placements for Cambridge clinical students. Following a suitable application and selection process, the Faculty Board of Clinical Medicine may grant affiliation to a hospital, general practice, or hospice providing clinical placements, enabling those providers to use the wording 'Affiliated to the University of Cambridge School of Clinical Medicine'. Following a suitable application and selection process, the General Board, on the recommendation of the Faculty Board of Clinical Medicine, may grant affiliation to a hospital making a very significant contribution to clinical course placement provision, enabling those hospitals to use the wording 'A teaching hospital partner of the University of Cambridge'.

REGULATIONS FOR EXAMINATIONS

Natural Sciences Tripos, Part II

(Statutes and Ordinances, p. 409)

With effect from 1 October 2021

The General Board, on the recommendation of the Committee of Management for the Natural Sciences Tripos, has approved an amendment to Regulation 30 for the subject Psychology, Neuroscience and Behaviour, to replace the project report with a grant proposal and a research dissertation, and to introduce a requirement to borrow one paper from the subjects of Psychology or Zoology for Part II of the Tripos.

Regulation 30.

Psychology, Neuroscience and Behaviour

By replacing sub-paragraph (b) with new sub-paragraphs (b) and (c), to read as follows:

- (b) one paper borrowed from the subjects of Psychology or Zoology under this regulation;
- (c) a grant proposal and a research dissertation, in printed or typewritten form, each of not more than 4,000 words, excluding tables, appendices, footnotes and bibliography.

Bachelor of Theology for Ministry

(Statutes and Ordinances, pp. 454 and 458)

With effect from 1 October 2020

The General Board, on the recommendation of the Faculty Board of Divinity, has approved the following amendments to the regulations for the degree of Bachelor of Theology for Ministry to amend the titles of certain papers and suspend others, and to reflect that there is no maximum to the number of papers to be taken by alternative modes of assessment and the Faculty Board's delegation of the receipt and approval of applications for special study, schemes of papers and proposed dissertations.

By amending the titles of B.Th.51 and B.Th.52 in Group E *from* 'Pastoral portfolio A' and 'Pastoral portfolio B' to 'Practical theology: Reflective pastoral practice A' and 'Practical theology: Reflective pastoral practice B' respectively.

Regulations 14, 19, 20, 21 and 22(a).

By amending the regulations to read as follows, with the following footnote:

- **14.** (a) Each full paper shall consist of either an examination of three hours' duration, or an examination of two hours' duration plus one essay (mixed mode), or two essays. The Faculty Board shall specify by supplementary regulation which one of these modes of assessment shall apply in the case of each paper.
- (b) Each half-paper shall consist of either an examination of two hours' duration, or one essay. The Faculty Board shall specify by supplementary regulation which one of these modes of assessment shall apply in the case of each half-paper.

- (c) All essays offered under the alternative modes of assessment specified under (a) or (b) above shall be of not more than 3,000 words in length, on a topic chosen by the candidate from a list of topics approved by the Faculty Board¹ not later than the first day of Full Michaelmas Term. Essays shall be typewritten, in English, and shall be submitted in accordance with detailed arrangements approved by the Faculty Board,¹ so as to arrive not later than the third Tuesday of Full Easter Term. Candidates who submit essays of more than 3,000 words in length shall be liable to be penalised by the Examiners.
- **19.** (a) A candidate who wishes to offer papers B.Th.34 or B.Th.47 under Regulations 16 or 17 shall submit an application, including the title of the proposed special study and a statement of the scheme of papers to be offered in the examination. Applications shall be submitted to the Faculty Board¹ so as to arrive not later than the division of the Michaelmas Term next preceding the examination concerned.
- (b) Each candidate must obtain the approval of the proposed title by the Faculty Board¹ not later than the last day of each Full Michaelmas Term. When the Board¹ has approved a title, no change shall be made to it or to the candidate's scheme of papers without the further approval of the Board.¹
- **20.** A candidate for the Second Examination may, with the permission of the Faculty Board,¹ submit in place of any full paper which he or she would otherwise offer under Regulation 17, a dissertation on a topic approved by the Board¹ A dissertation may be on any topic relating to the subject of any full or half-paper in Groups B, C, or D, but in approving a particular topic the Faculty Board¹ may stipulate that the candidate concerned may not offer (or have already offered) a particular paper or a particular prescribed subject within a paper; provided that no candidate shall offer more than one dissertation.
- **21.** (a) A candidate who wishes to offer a dissertation under Regulation 17 shall submit an application, including the title of the proposed dissertation and a statement of the scheme of papers to be offered in the examination. Applications shall be submitted to the Faculty Board¹ so as to arrive not later than the division of the Michaelmas Term next preceding the examination concerned.
- (b) Each candidate must obtain the approval of the proposed title by the Faculty Board¹ not later than the last day of each Full Michaelmas Term. When the Faculty Board¹ has approved a title, no change shall be made to it or to the candidate's scheme of papers without the further approval of the Committee.
- (c) A dissertation shall be typewritten and shall be of not less than 8,000 words and not more than 10,000 words in length, including footnotes but excluding bibliography. Candidates will be required to declare that the dissertation is their own work and that it does not contain material already used to any substantial extent for a comparable purpose. Candidates who submit dissertations of more than 10,000 words in length shall be liable to be penalised by the Examiners.
- (d) A dissertation shall be submitted to the Faculty Board, in accordance with detailed arrangements approved by the Board, so as to arrive not later than the third Tuesday of the Full Easter Term in which the examination is to be held.
- [22.] (a) Coursework presented for Papers B.Th.51 and B.Th.52 shall be submitted to the Faculty Board¹ in accordance with detailed arrangements approved by the Board,¹ so as to arrive not later than the third Tuesday of Full Easter Term. Candidates who submit work in excess of the stated maximum lengths shall be liable to be penalised by the Examiners.
- ¹ The Faculty Board of Divinity has agreed to delegate its authority to receive and approve applications under Regulations 14, 19, 20, 21 and 22(*a*) to the B.Th. Management Committee. Any applications concerning these matters should be addressed to the Secretary of the B.Th. Management Committee.

The Faculty Board of Divinity has approved the following changes to the supplementary regulations:

SUPPLEMENTARY REGULATIONS

By amending the titles of the two papers in Group E to read as follows:

B.Th.51. Practical theology: Reflective pastoral practice A B.Th.52. Practical theology: Reflective pastoral practice B

Master of Education

(Statutes and Ordinances, p. 464)

With effect from 1 October 2020

The General Board, on the recommendation of the Faculty Board of Education, has approved an amendment to the regulations for the degree of Master of Education to suspend the *Psychology and education* pathway, as listed in Regulation 11, for the 2021–22 academic year.

Bachelor of Medicine and Bachelor of Surgery

(Statutes and Ordinances, p. 477)

With effect from 1 July 2020

The General Board, on the recommendation of the Faculty Board of Clinical Medicine, has approved amendments to the regulations for the Second M.B. Examination, as follows:

By amending Regulations 14, 20(a) and the first part of 22 to read as follows:

- 14. A candidate who is unsuccessful in the examination in any subject of the Second M.B. Examination shall be eligible for re-examination, provided that, except by special permission of the Faculty Board granted in exceptional circumstances and subject to any conditions determined by the Board, and subject to Regulation 29, no student shall be a candidate in any subject on more than two occasions in total. The Faculty Board shall not normally grant a student special permission under this regulation on more than two separate occasions.
- **20.** (a) Except by permission of the Faculty Board in exceptional circumstances, and subject to any conditions determined by the Board, a student who is a candidate for the first time for Part I, Part II, or Part III shall offer all components.
- **22.** If at the first attempt a student fails to satisfy the Examiners in any component(s) of Part I, Part II, or Part III, he or she shall be eligible for re-examination in the relevant component(s) under conditions set by the Faculty Board, taking them separately or together, provided that
 - (a) except by permission of the Faculty Board in exceptional circumstances, and subject to any conditions determined by Board, a candidate for re-examination in Part III in any academic year following that in which he or she first took the examination shall offer all components of Part III.

With effect from 1 October 2020

The General Board, on the recommendation of the Faculty Board of Biology, has approved the amendment of Regulations 10 and 11 and the Supplementary Regulations so as to change the title of one of the subjects of the Second M.B. Examination, by replacing references to the Introduction to the Scientific Basis of Medicine (ISBM) or ISBM with references to the Foundations of Evidence Based Practice (FEBP) or FEBP.

Conservation Leadership for the M.Phil. Degree by advanced study

(Statutes and Ordinances, p. 522)

With effect from 1 October 2022

The General Board, on the recommendation of the Degree Committee of the Faculty of Earth Sciences and Geography, has approved the following amendments to the regulation for Conservation Leadership for the degree of Master of Philosophy by advanced study, to replace the requirement for two essays with one, and for three written exercises with coursework, and to add a new regulation concerning the form of examination for the coursework and the list of subjects for the essay.

By revising sub-paragraphs (a) and (b) and inserting new Regulation 2 to read as follows, [deleting sub-paragraph (d),] and numbering the existing regulation as 1:

- [1.] (a) one essay, each not exceeding 4,000 words, on subjects chosen by the candidate from a list of subjects approved by the Degree Committee for the Faculty of Earth Sciences and Geography, which shall be concerned with topics in conservation leadership;
- (b) coursework prescribed by the Degree Committee, which may include written work, a presentation or other exercises, or a combination of these;
- 2. The Degree Committee shall announce the form of examination for each piece of coursework and specify the limit to be placed on the length of any written work submitted under Regulation 1(b) and the list of subjects for the essay under Regulation 1(a) not later than the division of Michaelmas Term of the academic year in which the examination takes place.

Bachelor of Veterinary Medicine

(Statutes and Ordinances, p. 567)

With effect from 1 October 2020

The General Board, on the recommendation of the Faculty Boards of Biology and Veterinary Medicine, has approved amendments to the regulations for the degree of Bachelor of Veterinary Medicine to revise the form of assessment for the examination in Preparing for the Veterinary Profession.

Regulation 7.

By revising sub-regulation (f) and inserting new sub-regulation (g) as follows:

- (f) The examinations in ISBM and VRB shall each consist of a written paper of forty-five minutes.
- (g) The examination in PFVP shall consist of a written paper of one hour.

With effect from 1 October 2020

The General Board, on the recommendation of the Faculty Board of Biology, has approved the amendment of Regulations 7, 8, 11, 20 and the Supplementary Regulations so as to change the title of one of the subjects of the Second Vet.M.B. Examination, by replacing references to the Introduction to the Scientific Basis of Medicine (ISBM) or ISBM with references to the Foundations of Evidence Based Practice (FEBP) or FEBP.

With effect from 1 September 2021

The General Board, on the recommendation of the Faculty Board of Veterinary Medicine, has approved amendments to the regulations for the degree of Bachelor of Veterinary Medicine so as to revise the examinations and assessment structure for the Final Veterinary Examination, as set out below.

Part I of the Final Veterinary Examination will be delivered across the six terms of the fourth and fifth year of the course, comprising ten written examinations, an assessment of clinical practical skills and a computer-based examination. No candidate will be permitted to make more than two attempts at Part I of the Final Veterinary Examination except by permission of the Faculty Board in exceptional circumstances.

The existing Part III of the Final Veterinary Examination will be abolished and replaced by an extended Part II which will include four written examinations and *viva voce* examinations at the discretion of the Examiners as specified by the Faculty Board from time to time, an assessment of clinical practical skills and a portfolio of other assessments and evidence of training. No candidate will be permitted to make more than two attempts at Part II of the Final Veterinary Examination except by permission of the Faculty Board in exceptional circumstances.

By removing the heading to the 'Revised Regulations'.

In Regulation 1 by replacing '2003' with '2020'.

By amending the first sentence of Regulation 12 so as to read:

The Final Veterinary Examination shall consist of two Parts.

In Regulation 14(c) by replacing the reference to Regulation 19(b) and (c) with a reference to Regulation 17(b) and (c).

By amending Regulation 17:

- to replace references to Part III with references to Part II;
- to change the date of the examination from the Friday of the second week of Full Easter Term to the Tuesday of the second week of Full Easter Term;
- to insert the following text at the end of the third paragraph:
 - In the case of an unsatisfactory standard being achieved in any element of coursework, including practical work, resubmission will be required at the time of the September examination for Part III.
- to replace the reference to Regulation 19 with a reference to Regulation 17;
- to replace 'the elective' with 'the research project' and 'elective study period' with 'research project and tracking period';
- to replace 'dissertation' with 'written research project'.

By amending Regulation 18:

- to replace the references to Part III with references to Part II and the reference to Part II with a reference to Part I;
- to remove sub-regulation (a)(iii) and renumber existing (iv) as (iii);
- in sub-regulation (b) to replace the reference to Regulation 15 with a reference to Regulation 14.

By amending Regulation 19:

- in sub-regulation (a) by replacing the reference to Regulation 16(a) with a reference to Regulation 15(a);
- in sub-regulation (c) by replacing the reference to Regulation 26 with a reference to Regulation 24, and replacing the text 'more than three occasions' with 'more than two occasions'.

In Regulation 22(d) by replacing the words 'in Part I, in Part II, and in each section of Part III' with the words 'in Part I, and in each section of Part II'.

By removing Regulations 15 and 16 and renumbering the remaining regulations and updating any remaining cross-references.

In the Supplementary Regulations for Part I of the Final Veterinary Examination, by replacing the existing list of papers and the final sentence with the following:

- Paper 1. Principles of infectious diseases
- Paper 2. Principles of clinical practice (including clinical pathology) I
- Paper 3. Farm animal studies I and Equine studies I
- Paper 4. Principles of clinical practice (including clinical pathology) II and Veterinary public health studies I
- Paper 5. Farm animal studies II
- Paper 6. Small animal studies I and Veterinary public health studies II
- Paper 7. Farm animal studies III and Equine studies II
- Paper 8. Small animal studies II
- Paper 9. Equine studies III
- Paper 10. Small animal studies III

Each paper will be of two hours' duration.

NOTICES BY FACULTY BOARDS, ETC.

Historical Tripos, 2023: Notice of subjects and periods

Part I, Paper 1: Themes and sources

The Faculty Board of History gives notice that the options for Paper 1 of Part I of the Historical Tripos (*Statutes and Ordinances*, p. 345) in 2023 will be as follows:

- i Money and society from late antiquity to the financial revolution
- ii Royal and princely courts: Ancient, medieval and early modern
- iii Religious conversion and colonialism
- 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 The Bandung moment: Revolution and anti-imperialism in the twentieth century
- xi Utopian writing 1516-1789
- xiii Earning a living 1377-1911: Work, occupations, gender and economic development in England
- xiv Film and society 1946-69: The remaking of national identities
- xv World environmental history

Part II, 2023: Papers 2 and 3, Special subjects

The Faculty Board also gives notice that the Special Subjects for Papers 2 and 3 of Part II of the Historical Tripos (Statutes and Ordinances, p. 346) in 2023 will be as follows:

Thucydides (associated with C1 of Part II of the Classical Tripos)	(A)
The 'Angevin Empire', 1150s–1230s	(B)
Heresy, inquisition and society: Southern France c. 1150–1320	(D)
The palace and the coffeehouse: The power of place in Ottoman History, 1300	0-1800 (E)
The Little Lion: Edward III's England, 1327–1347	(F)
The 1848 Revolutions	(I)
A women's history of war, 1750–1815	(J)
Empires and the American imagination, c. 1763–c. 1900	(M)
Religion and nationalism in the making of Zimbabwe, 1948 to the present	(O)
Sources of East Asian modernity, China and the Chinese Overseas, c. 1890s-	-1930s (P)
Indian democracy: Ideas in action, c. 1947–2007	(Q)

Coursework

Coursework

The subjects for the following papers in Part II of the Historical Tripos in 2023 will be as follows:

- 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 Empire 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, AD 527–700
- 9 Slavery in the Greek and Roman worlds [Paper C3 of Part II of the Classical Tripos]
- 10 Empire's legacy: The transformations of Roman Italy, 350 BC-AD 300 [Paper D4 of Part II of the Classical Tripos]
- 11 Early medicine [Paper BBS113 of Part II of the Natural Sciences Tripos (Biological and Biomedical Sciences)]
- 12 The 'rule of law' in early modern Britain: State power, criminal justice, and civil liberties, c. 1500-c. 1800
- 13 Man, nature and the supernatural, c. 1000–c. 1600
- 14 Material culture in the early modern world
- 16 Overseas expansion and British identities, 1585–1714
- 17 The politics of knowledge from the late Renaissance to the early Enlightenment
- 19 Women, gender and paid work in Britain since c. 1850
- 21 Middle Eastern modernities, c. 1850–2011
- 22 Connected histories of the USA, USSR and Russia since 1945
- 23 The long road to modernisation: Spain since 1808
- 24 Rethinking Europe from the Mediterranean shores, 1796–1914
- 25 Central Europe in the global twentieth century
- 26 Ireland and the Irish since the Famine
- 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

Data analysis

Sustainable water engineering

Candidates for Part II in 2023 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, D, E or F or by offering one of the following Papers 7, 8, 9, 10, 11, 12, 13, 14, 16 and 17 or a dissertation, provided that its subject falls mainly in the period before 1750.

Candidates for Part II in 2023 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, 10, 14, 22, 23, 24 and 25.

Advanced Chemical Engineering for the M.Phil. Degree, 2021–22

The Degree Committee for the Faculty of Engineering gives notice that the modules available to candidates studying the one-year course in Advanced Chemical Engineering for the degree of Master of Philosophy (*Statutes and Ordinances*, p. 515) in the academic year 2021–22 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 2021, provided that no candidate's preparation for the examination will be affected by the change.

Mandatory modules

DA

4D15

NM	Numerical methods in chemical engineering	Coursework
Elective mo	odules (candidates must take six)	
B1	Advanced transport processes	Examination
B2	Electrochemical engineering	Examination
В3	Pharmaceutical engineering	Examination
В6	Fluid mechanics and the environment	Examination
B7	Interface engineering	Examination
B8	Adsorption and advanced nanoporous materials	Coursework
C1	Optical microscopy	Examination
C3	Healthcare biotechnology	Examination
C6	Biosensors and bioelectronics	Coursework
C8	Biophysics	Examination

4E1	Innovation and strategic management of intellectual property	Coursework
4E3	Business innovation in a digital age	Coursework
4E4	Management of technology	Coursework
4E5	International business	Coursework
4E11	Strategic management	Coursework
4G4	Biomimetics	Coursework
4G5	Materials and molecules: Modelling, simulation and machine learning	Coursework
4M16	Nuclear power engineering	Examination
4M22	Climate change mitigation	Coursework
4M23	Electricity and environment	Coursework

Research requirements

Each candidate must submit a dissertation of up to 10,000 words on a subject approved by the Degree Committee.

Bioscience Enterprise for the M.Phil. Degree, 2021–22

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. 521) in the academic year 2021–22 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 2021, provided that no candidate's preparation for the examination will be affected by the change.

Science and Technology (ST) modules

ST1	Biopharmaceutical discovery	Coursework
ST2	Biopharmaceutical development	Coursework
ST3	Trends in biotechnology	Coursework
ST4	Diagnostics and devices	Coursework
ST5	Agricultural biotechnology	Coursework

Business (B) modules

B1	Technology and innovation management	Coursework
B2	Healthcare economics	Coursework
В3	Law and intellectual property	Coursework

Transitionary (T) modules

T1	Building a bioscience enterprise	Coursework
T2	Partnerships and alliances	Coursework
T3	Finances and valuation	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
T4	Bioscience enterprise in practice

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).

Coursework

Biotechnology for the M.Phil. Degree, 2021–22

Principles of biotechnology (double module)

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. 521) in the academic year 2021–22 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 2021, provided that no candidate's preparation for the examination will be affected by the change.

Core modules

BPT

D1 1	Timespies of diotectimology (addicte module)	Coursework
BPC	Biotechnology practical course (double module)	Coursework
Elective mod	ules (candidates must take six)	
В3	Pharmaceutical engineering	Examination
C1	Optical microscopy	Examination
C3	Healthcare biotechnology	Coursework
C6	Biosensors and bioelectronics	Coursework
C8	Biophysics	Examination
BX1	Chemical biology and drug discovery	Coursework
BX2	Biomaterials	Coursework and examination
MAM2	Systems biology	Coursework

MAM2	Systems biology	Coursework
4G3	Computational neuroscience	Coursework
4G4	Biomimetics	Coursework
4G5	Materials and molecules: Modelling, simulation and machine	Coursework
	learning	

	learning	
4G6	Cellular and molecular biomechanics	Examination
4E1	Innovation and strategic management of intellectual property	Coursework
4E4	Management of technology	Coursework
4E5	International business	Coursework
4E11	Strategic management	Coursework
418	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, 2021–22

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. 528) in the academic year 2021–22, 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 2021, 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 (Students must choose four or six, depending on whether a long or short dissertation is taken)

4A2	Computational fluid dynamics	Coursework
4A3	Turbomachinery I	Coursework and examination
4A4	Aircraft stability and control	Coursework
4A7	Aerodynamics	Coursework
4A9	Molecular thermodynamics	Examination
4A12	Turbulence and vortex dynamics	Examination
4A13	Combustion and IC engines	Examination
4A15	Aeroacoustics	Examination
4B19	Renewable electrical power	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
4E6	Accounting and finance	Coursework
4E11	Strategic management	Coursework
4F2	Robust and non-linear systems and control	Examination
4F3	Optimal and predictive control	Examination
4F12	Computer vision	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
4M17	Practical optimisation	Coursework
4M19	Advanced building physics	Coursework
4M20	Robotics	Coursework
4M22	Climate change mitigation	Coursework
4M23	Electricity and environment	Coursework
5R10	Turbulent reacting flows	Coursework
5R18	Environmental fluid mechanics and air pollution	Coursework
ESD450	Policy, legislation and government	Coursework
B2	Electrochemical engineering	Examination

Research requirements

Each candidate must submit a dissertation either of up to 10,000 words (if the candidate has taken six elective modules) or of up to 20,000 words (if the candidate has taken four elective modules) on a subject approved by the Degree Committee.

Engineering for Sustainable Development for the M.Phil. Degree, 2021–22

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. 528) in the academic year 2021–22 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 2021, provided that no candidate's preparation for the examination will be affected by the change.

Core modules (mandatory)

Teaching to take place in Michaelmas Term 2021

ESD150	Driving change towards sustainability	Coursework
ESD200	Sustainability methods and metrics	Coursework
ESDSE	Stakeholder engagement	Coursework

Teaching to take place in Lent Term 2022

ESD380	Resilience of infrastructure systems	Coursework
ESD560	Innovations in sustainable design and manufacturing	Coursework
ESDCCP	Client consultancy project	Coursework

Elective modules

Teaching to take place in Michaelmas Term 2021

ESD450	Policy, legislation and government	Coursework
ESD650	International development	Coursework
4B19	Renewable electrical power	Examination ¹
4D13	Architectural engineering	Coursework
4D14	Contaminated land and waste containment	Coursework and examination
4E1	Innovation and strategic management of intellectual property	Coursework
4E3	Business innovation in a digital age	Coursework
4E4*	Management of technology	Coursework
4E5	International business	Coursework
4E6*	Accounting and finance	Coursework
4M22	Climate change mitigation	Coursework

¹ All written examinations are of one and a half hours' duration unless otherwise specified.

$TPE20^2$	Management of the innovation process	Coursework
TPE23 ²	Negotiation skills	Coursework
ESD-A2	Sustainable architecture and urban design	Coursework

Teaching to take place in Lent Term 2022

ESD900	Management of resilient water systems	Coursework
ESD1000	Energy, development and rural livelihood	Coursework
4D4	Construction engineering	Coursework
4E11*	Strategic management	Coursework
4G4	Biomimetics	Coursework
4M23	Electricity and environment	Coursework
5R18	Environmental fluid mechanics	Coursework
ETB2	Renewable energy: Wind, wave, tidal and hydro	Coursework
ETB3 ³	Renewable energy: Solar and biomass	Coursework
ETB4	Energy systems and efficiency	Coursework
TP4 ²	Business, government and technology in emerging markets	Coursework

Research requirements

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

- ² Limited places available for ESD students or a cap will be placed of approx. five ESD students per module.
- ³ Lectures in both Michaelmas and Lent Terms (classed as a Lent module).

Industrial Systems, Manufacture and Management for the M.Phil. Degree, 2021–22

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. 534) in the academic year 2021–22, 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 2021, provided that no candidate's preparation for the examination will be affected by the change.

Compulsory modules

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	

Elective modules (candidates choose one)

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 dissertation 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, 2021–22

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. 536) in the academic year 2021–22 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 2021, provided that no candidate's preparation for the examination will be affected by the change.

Core modules

MLMI1	Introduction to machine learning (three-quarters)	Coursework and examination
MLMI2	Speech recognition	Coursework
MLMI4	Advanced machine learning	Coursework
MLMI6	Information theoretic ideas in statistical inference (half)	Coursework
MLMI7	Reinforcement learning and decision making	Coursework
MLMI8	Neural machine translation and dialogue systems	Coursework
MLMI10	Designing intelligent interactive systems (half)	Coursework
MLMI12	Computer vision (optional)	Coursework
MLMI13	Natural language processing (optional)	Coursework
MLMI14	Spoken language processing and generation	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
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
L48	Machine learning and the physical world	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, 2021–22

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. 540) in the academic year 2021–22 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 2021, 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 (double)	Coursework and examination
NE5	Nuclear safety principles and practice (half)	Coursework and examination
NE6	Nuclear policy	Coursework
NE7	Nuclear practice (half)	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
4F2	Robust and nonlinear systems and control	Examination
4F12	Computer vision	Examination
418	Medical physics	Examination
4M15	Sustainable energy	Coursework and examination
4M17	Practical optimisation	Coursework
4M18	Present and future energy systems	Examination
4M22	Climate change mitigation	Coursework
4M23	Electricity and environment	Coursework
ESD560	Innovations in sustainable manufacturing	Coursework
В6	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.

Connected Electronic and Photonic Systems for the M.Res. Degree, 2021-22

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 (*Statutes and Ordinances*, p. 551) in the academic year 2021–22, 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 2021, provided that no candidate's preparation for the examination will be affected by the change.

Electronic components and systems

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
UCLAPD	Advanced photonic devices	Examination
UCLOTN	Optical transmission and networks	Examination
UCLPSS	Photonic sub-systems	Examination

Coursework and examination

Business

4E4	Management of technology	Coursework
UCLTBE	Telecommunication business environment	Coursework
Electives		
4B5	Nanotechnology	Coursework and 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
UCLETC	Entrepreneurship theory and practice	Coursework
UCLIOT	Internet of things	Coursework

UCLSNS Software for network services and design Coursework

The modules beginning 'UCL' are provided and examined by University College London.

Physics and optics of nano-structure

Research

UCLPON

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

Future Infrastructure and Built Environment for the M.Res. Degree, 2021–22

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. 551) in the academic year 2021–22, 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 2021, provided that no candidate's preparation for the examination will be affected by the change.

Core modules (all compulsory)

CM1	Resilient infrastructure	Coursework
CM2	Technical challenges	Coursework
CM3	Research methods	Coursework
CM4	Transferable skills	Coursework
NMIS	Nurturing and managing innovation in science	Coursework

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

Licetive mou	unes (two to be enosen in consultation with the course Director)	
4C6	Advanced linear vibrations	Coursework and examination
4C7	Random and non-linear vibrations	Coursework and examination
4D2	Advanced structural design	Coursework
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
4D15	Sustainable water engineering	Coursework
4E6	Accounting and finance	Coursework
4F3	An optimisation based approach to control	Examination
4F7	Digital filters and spectrum estimation	Examination
4F10	Deep learning and structured data	Examination
4F12	Computer vision	Examination
4F13	Probabilistic machine learning	Coursework
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
4M23	Electricity and environment	Coursework
4M24	Computational statistics and machine learning	Coursework and examination
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
ESD650	International development	Coursework

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, 2021-22

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 (*Statutes and Ordinances*, p. 551) in the academic year 2021–22, 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 2021, 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
4A12	Turbulence and vortex dynamics	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
4M23	Electricity and environment	Coursework
4M24	Computational statistics and machine learning	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.

Sensor Technologies and Applications for the M.Res. Degree, 2021–22

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. 553) in the academic year 2021–22, 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 2021, 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
NMIS	Nurturing and managing innovation in science	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
4B25	Embedded systems for the internet of things	Coursework
4C3	Electrical and nano materials	Examination
4C15	MEMS: Design	Coursework and examination
4E12	Project management	Coursework
4F12	Computer vision	Examination
4F13	Probabilistic machine learning	Coursework
418	Medical physics	Examination
4I15	Mobile robot systems	Coursework
4M20	Robotics	Coursework
4M22	Climate change mitigation	Coursework
B5	Optical imaging and microscopy	Examination
C6	Biosensors and bioelectronics	Coursework
C8	Biophysics	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).

REPORTS

Report of the General Board on major modifications to the Education Tripos

The GENERAL BOARD begs leave to report to the University as follows:

- 1. The General Board proposes a revision of the Education Tripos with effect from October 2023. The final intake on the current structure of the Tripos will be in October 2022. The revision of the Education Tripos has the support of the Faculty of Education, the Council of the School of the Humanities and Social Sciences, the Senior Tutors' Education Committee, the Senior Tutors' Committee, the Academic Standards and Enhancement Committee and the General Board's Education Committee.
- 2. The Faculty held a Tripos review, led by Dr Black-Hawkins, and comprising a panel made up of both internal (Faculty) and external colleagues from other universities, in Michaelmas Term 2018, to review Tripos provision and consider a number of alternatives, including the possibility of withdrawing the Tripos altogether. The review recommended that the Tripos should continue but recommended rationalisation of the provision. The Faculty Board set up a working group which reported in Lent Term 2020, making recommendations on how the regulations should be amended to address concerns around the cost of delivery of the Tripos and student experience.
- 3. The modifications reduce the number of total papers offered, while allowing all students greater choice by removing the rigid track structure, offering greater flexibility for students to develop their specialisms. The shift to a two year Part II structure enables optional papers to be shared between Part IIA and IIB, improving student experience by ensuring there is a critical mass of students in each class and protecting against the cost of delivering papers to a very small number of students. Overall across the three years the number of taught papers is reduced from twenty-eight to fourteen, reducing cost and easing the burden on staff workloads.
- 4. The Tripos currently has a cohort of forty-two students in Part IA and there were 172 applications for admission in 2021–22. The Faculty's strategic plan aims to increase the annual undergraduate intake to forty-five. Nineteen Colleges currently offer the Education Tripos and this number has increased since the current Tripos was introduced, and the spread across Colleges is becoming less heavily weighted towards Homerton College.
- 5. The cost of delivery of the current Tripos has been a significant cause for concern. For a cohort of around a hundred and twenty students over three years, the Faculty currently offers over thirty papers, of which twenty-six are taught in the Faculty. Each paper has thirty-two hours of teaching, plus seven days of administrative time for examination and paper co-ordination. This is not sustainable, and is a major reason for the Faculty to propose these changes. Despite the high number of papers currently taught, students have complained of a lack of flexibility, with a significant number of students wishing to take papers which are not available to them in their track. This is because some papers are optional but are available only for one track. This often leads to low group numbers. resulting in relatively high costs and arguably a poorer pedagogical experience for students.
- 6. A wide consultation on the proposal included students, staff and the six Tripos External Examiners. Feedback on draft proposals was received from the Academic Standards and Enhancement Committee and the Senior Tutors' Education Committee in Lent Term 2021.

- The external response has been strongly supportive recognising the value of 'pathways' rather than 'tracks'; the clarity of reducing the number of papers offered in any given year; and the commitment within this revision towards developing approaches to assessment. The 'core' progression through the three years from Education and Learning, through Educational Research to the dissertation was also recognised as providing a solid structure.
- 7. The student feedback emphasised the value at least at application stage of the track identities but also identified the flexibility of pathways as an advantage. The main areas of concern also identified by Committees have been around the clarity these options give to intellectual progression (whether in tracks or pathways or within a multidisciplinary degree) and that each year offers a distinct deepening of learning. The importance that this constitutes a degree programme recognisable beyond the Collegiate University was also implied in the feedback. The combination of compulsory and optional papers in Part II ensures that there is adequate intellectual progression through Part II (and from Part IIA to Part IIB), and in relation to Part I.

The compulsory papers in each year of Part II equip students with increasingly complex skills, including analytical and critical thought, research skills and interdisciplinary enquiry skills, and support students to apply these to the particular combination of optional papers that they select for each of the two years of Part II. Intellectual progression through the degree is further supported by the established teaching approach which uses individual (or very small-group) supervision for both compulsory and optional papers and therefore allows for individual focus on interdisciplinary topics, research methods, and contexts, particular to each students' chosen pathway. All papers will consist of thirty-two hours of teaching, with one two-hour or two one-hour sessions per week during term-time in Michaelmas Term and Lent Term, with supervisions supporting these. Revision supervisions will be scheduled in Easter Term prior to examinations. The assessment methods for the revised degree structure strongly correlate to the existing Tripos, which incorporates a blend of examinations and coursework assessments. The optional papers available at Part IIA and IIB contain a range of assessments, with some papers being assessed by final exam and some papers assessed with a portfolio of coursework. This enables students to have an element of choice in putting together a balance of papers with varied assessments according to their specialisms and preferences.

8. Part I shall consist of four compulsory papers which provide the foundations to support students undertaking a range of options in Part II, which retains the potential for students to develop a specialism through their degree. The four papers support the multi-disciplinary approach to the degree by engaging with elements including History, Philosophy, Psychology, Sociology, Literature and the Arts, and draw on scholarship from the UK and a range of international contexts, to prepare all students for more specialist options in Part II. These papers build on established existing teaching within the Faculty and respond to feedback offered by previous student cohorts. A compulsory, non-examined short course in academic writing skills, to support the differences in writing styles required for the different disciplines, will also be provided.

- 9. The new two-year Part II shall consist of two compulsory papers providing the foundations of Education Research in preparation for the dissertation, and two optional papers in Part IIa. In Part IIB students take one compulsory paper (the dissertation) and three optional papers. Optional papers in Part II build on the core foundations provided in Part I, offering pathways of specialism that can be marketed to prospective students, including Psychology, Drama and Literature, and International Development. Through the variety of optional papers, students can creatively build up their own areas of specialisation offering greater flexibility. The structure offers potential for future optional papers that reflect a wider range of Faculty research, and remains adaptable to changes in staffing and research direction.
- 10. Students wishing to transfer into the Education Tripos at the beginning of their third year would do so into Part IIA and would need to complete both Part IIA and Part IIB (therefore studying for four years). This restriction means that the Preliminary Examination to Part II shall not be necessary as a consequence of the new structure of the Tripos. The Preliminary Examination to Part II shall therefore be withdrawn. Students would be able to continue to transfer into Part IIA after the end of their first year in another Tripos.
- 11. The reduction in the number of taught papers in the proposed revisions to fourteen (from the current twenty-eight) will substantially ease the burden on teaching resources and mean that the majority of all papers will be able to be taught by University Teaching Officers (UTOs) and Senior Teaching Associates / Teaching Associates (STA / TAs) on existing long-term contracts within the Faculty of Education. Currently, teaching and examining

- on the Tripos is provided by twenty-three UTOs and five STA / TAs on long-term contracts, as well as TAs on short term contracts and other, hourly paid colleagues. It is anticipated that the revised structure will enable the teaching and examining to be delivered by these UTOs and permanent STA / TAs without the need to rely on short-term contracts or hourly paid colleagues, except in cases where their particular expertise will enhance the student experience. The flexibility afforded by the range of optional papers offered at Part II also creates opportunities for other UTOs who are not currently involved in Tripos teaching to contribute their expertise if desired, and gives scope for this to adapt and evolve according to emerging areas of work and new appointments.
- 12. Currently Education Tripos teaching activities and examinations take place within the Donald McIntyre Building (Faculty of Education) and the Mary Allen Building (Homerton College). Given the substantial reduction in the number of taught papers from the current Tripos provision, it is expected that all revised Tripos teaching will be accommodated within these existing spaces and will not require any centrally bookable space. Likewise, no additional costs are anticipated for Examiners, rather a reduction in these costs is anticipated due to the reduction of the number of papers and the removal of the tracks.
- 13. Positioning the revised Tripos as an interdisciplinary course aligns with the increasing internationalisation of the student body (some entering with International Baccalaureate qualifications instead of A-Levels) and the range of intellectual interests that students bring; and addresses the issue of students moving between the current tracks. The in-built flexibility gives the Faculty the flexibility to develop new pathways in the future.
- 14. The General Board recommends:
- I. That the revised Education Tripos be established with effect from 1 October 2023 with new regulations as set out in Annex I of this Report;
- II. That the Preliminary Examination to Part II of the Education Tripos be withdrawn with effect from 1 October 2023 and consequential amendments be made to Ordinances governing Preliminary Examinations to remove references to the Preliminary Examination to Part II of the Education Tripos with effect from 1 October 2022.

22 July 2021	STEPHEN TOOPE, Vice-Chancellor	Tim Harper	Anna Philpott
	Zaynab Ahmed	NICHOLAS HOLMES	RICHARD REX
	Kristine Black-Hawkins	Amelia Jabry	Graham Virgo
	Ann Copestake	PATRICK MAXWELL	CHRIS YOUNG
	JOHN DENNIS	NIGEL PEAKE	

ANNEX I

EDUCATION TRIPOS

REVISED REGULATIONS¹

- 1. The Education Tripos shall consist of three Parts: Part I, Part IIA and Part IIB; a separate class-list shall be compiled for each part.
 - **2.** The following may present themselves as candidates for Part I:
 - (a) a student who has kept one term, provided that three complete terms have not passed after their first term of residence;
 - (b) a student who has obtained honours in another Honours Examination, in the year next after so obtaining honours, provided that nine complete terms have not passed after their first term of residence.
 - 3. The following may present themselves as candidates for Part IIA:
 - (a) a student who has obtained honours in Part I of the Education Tripos, in the year next after so obtaining honours, provided that they have kept four terms, provided that nine complete terms have not passed after their first term of residence;
 - (b) a student who has obtained honours in another Honours Examination in the year next after so obtaining honours, provided that twelve complete terms have not passed after their first term of residence.
- **4.** A student who has obtained honours in Part IIA of the Education Tripos may present themselves as candidates for honours in Part IIB provided that they have kept seven terms and that twelve complete terms have not passed after their first term of residence.
 - 5. No student shall be a candidate for any Part and also for another Honours Examination, in the same term.
- **6.** No student who has been a candidate for any Part shall again be a candidate for the same Part. No candidate shall offer in any Part of the Tripos any paper, dissertation, or other exercise that they have previously offered in any other Honours examination.
- 7. The Faculty Board of Education shall have power to issue from time to time supplementary regulations defining or limiting all or any of the subjects of examination, and to modify, alter, or withdraw such supplementary regulations as occasion may require, provided that due care is taken to give sufficient notice of any change.
- **8.** Public notice of any variable subjects for the examinations in any year shall be given by the Faculty Board before the end of the Easter Term in the year next preceding the examination to which they apply; provided that the Board shall have the power of subsequently issuing amendments if they have due reason for doing so, and if they are satisfied that no student's preparation for the examination is adversely affected.
- **9.** The Faculty Board shall publish details of the coursework, dissertations, reports, performances, workshops and practical examinations required of candidates for each Part of the Tripos not later than the beginning of the Full Michaelmas Term next preceding the examination.
- 10. The Faculty Board shall nominate such number of Examiners as they deem sufficient to conduct the examinations. The Faculty Board shall also have power to nominate one or more Assessors to assist the Examiners in any subject of the Tripos. Assessors shall propose questions in the papers or parts of papers assigned to them by the Examiners, shall mark the answers of the candidates in those papers or parts of papers, and shall advise the Examiners on the performance of candidates in the examination. Assessors may be summoned to meetings of the Examiners for the purpose of consultation and advice.
- 11. In the class-lists for each Part of the Tripos, the names of the candidates who obtain honours shall be arranged in three classes, of which the second shall be divided into two divisions. In addition the Examiners may affix a mark of distinction to the names of candidates placed in the first class whose work is of special merit. The names in the first and third classes and each division of the second class shall be arranged in alphabetical order.

Part I

12. The scheme of examination for Part I shall be as follows:

Paper 1 Introduction to education, systems, and disciplines

Paper 2 Learning and human development Paper 3 Education, creativity, and culture

Paper 4 Education and social justice

13. Papers in Part I shall each be assessed either by a written paper of three hours' duration, or by coursework, or by a combination of coursework and a written paper of two hours' duration. Details of the modes of assessment and of any coursework required shall be published by the Faculty Board not later than the beginning of the Michaelmas Term next preceding the examination.

¹ These regulations will come into effect in accordance with the timetable in Temporary Regulation 21, p. [000].

PART II

14. The scheme of examination for Part IIA and Part IIB be shall be:

Paper 5 Designing educational research

Paper 6 Literature review Paper 7 Dissertation Papers 8–26 Special subjects

Papers 8–26 shall comprise such number of papers on special subjects as the Faculty Board shall announce from time to time, in accordance with Regulations 7 to 9. There shall be not fewer than ten papers in any one academic year. Some of these papers may be borrowed from other Triposes. A candidate may not offer more than one borrowed paper in any one Part.

- **15.** A candidate for Part IIA shall offer Paper 5 and Paper 6, and two papers on special subjects chosen from Papers 8–26.
- **16.** A candidate for Part IIB shall offer Paper 7, and three papers on special subjects chosen from Papers 8–26.
- 17. Papers 8–26 shall be assessed according to the scheme published by the Faculty Board by the beginning of the Michaelmas Term next preceding the examination, except for borrowed papers, each of which shall be assessed by the method set out by the appropriate authority for the Tripos from which it is borrowed.
 - **18.** Papers 5, 6 and 7 shall be assessed by the submission of coursework.
- 19. The Paper 6 literature review report shall be of not less than 5,000 words and not more than 7,000 words, excluding notes and appendices, on a topic of the candidate's choice, subject to the approval of the Faculty Board. The Paper 7 dissertation shall be of not less than 8,000 words and not more than 10,000 words, excluding notes and appendices, on a topic of the candidate's choice, subject to the approval of the Faculty Board.
- **20.** At the discretion of the Examiners, a candidate for any Part may be examined *viva voce* on their coursework, report or dissertation.

TEMPORARY REGULATION

21. The examinations for the Education Tripos (Revised Regulations) shall be held for the first time as follows:

Part I in 2024

Part IIa in 2025

Part IIB in 2026

Report of the General Board on the introduction of a Design Tripos and Master of Design Degree in the Faculty of Architecture and History of Art

The GENERAL BOARD begs leave to report to the University as follows:

- 1. The General Board proposes that a new Tripos in Design and a new degree of Master of Design, titled the M.Des., be introduced from October 2024.
- 2. The proposal has been developed by the Department of Architecture, with support from colleagues in the Departments of Engineering and Materials Science and Metallurgy. It has the support of the Faculty Board of Architecture and History of Art, the Council of the School of Arts and Humanities, the Senior Tutors' Committee, the Undergraduate Admissions Committee, the Admissions Forum, the Planning and Resources Committee and Resource Management Committee, and the General Board's Education Committee.
- 3. The Design Tripos will be a four-year undergraduate course that will integrate the arts and sciences through designing and making to address societal and environmental challenges. The Tripos shall consist of four parts: Part IA, Part IB, Part IIA and Part IIB. A student who successfully completes up to and including Part IIA will be eligible for the Bachelor of Arts degree. On completing the requisite number of terms, a student who has obtained honours in Part IIB of the Design Tripos will obtain a Master of Design (M.Des.) degree. Full details are set out in the regulations attached as Annexes I and II to this Report.
- 4. The Design Tripos will be governed by the Faculty Board of Architecture and History of Art, with its detailed administration being undertaken by the Department of Architecture. For each of the four Parts of the Design Tripos, there will be a Board of Examiners, each with a Chair supported by Examiners and Assessors.
- 5. The Department of Architecture currently offers a three-year B.A. (Hons) Architecture undergraduate course. The B.A. (Hons) course has been oversubscribed for decades with a consistent ratio of over ten applicants / place, applications increasing by an additional 35% last year. The Department performs well in diversity metrics and widening participation. In the current Architecture Tripos, all papers are offered as core papers (i.e. no optional papers). The Design Tripos fits with the plans for growth and expansion of provision of integrated Master's courses by the Department of Architecture within the School of Arts and Humanities (SAH), reducing the risk of lack of uptake.
- 6. The course intake for the B.A. (Hons) Architecture Tripos has been 45 students on average for the past five years (with a higher intake of 53–55 students in academic years 2019–21). The first Part IA Design Tripos cohort will be admitted in academic year 2024–25. The intention and aim is for growth in student numbers at the Department of Architecture to reach a total intake of 90 students per year by offering two distinct Tripos courses: the existing three-year B.A. (Hons) Architecture degree, and the new proposed four-year M.Des. course through the Design Tripos, with both Triposes having 45 students per year group at steady-state (academic years 2027+).
- 7. The Department of Architecture has engaged with the Senior Tutors' Education Committee, the Senior Tutors' Committee, the Admissions Forum, the Undergraduate Admissions Committee and the Size and Shape Group on how the Design Tripos fits in with the future size and shape of the collegiate University, and overall numbers are within the planned student numbers for the School of Arts and Humanities. The projected numbers are small for any one

- College. Directors of Studies in Architecture will act as subject specialists for admissions and provide direction for the studies of admitted students. At present, more than half the Colleges have external Directors of Studies in Architecture. The additional M.Des. teaching posts will allow more Colleges to appoint Fellows in the subject.
- 8. All of the teaching will be provided by the Department of Architecture. Upfront Surplus Improvement Fund (SIF) investment has been approved for the Design Tripos by the Planning and Resources Committee. The SIF investment and student fees will cover costs for teaching staff (11 UTOs, including 9 new UTO posts, 2 new technical Teaching Associates and 2 new administrative staff), space charges (for ~1000m²), set-up of a fabrication laboratory and co-working spaces, SAH overheads and library costs, central costs and teaching consumables for students. The proposal carries no significant administrative cost implications; on the contrary, a significant return on the SIF investment is expected.
- 9. Teaching will take place throughout the day during term-time within the Department of Architecture (Scroope Terrace site and Dyson Building). New teaching space of around 1000m^2 will be required for the M.Des. Design Tripos, which will be shared with the existing B.A. (Hons) Architecture Tripos. The Department of Architecture is working with the University Estates Division to identify suitable space.
- 10. The introduction of the Design Tripos is not anticipated to adversely affect the level and quality of demand and provision for other Cambridge Triposes, including the Architecture Tripos. Indeed, in order to highlight the particular characteristics of the Design Tripos and to distinguish it from other courses within the University, the different degree title of Master of Design is necessary. The proposed Tripos draws upon a different applicant pool; for example, the course entry requirements for the M.Des. Design Tripos are different to the B.A. (Hons) Architecture Tripos, with the former requiring Maths (not Further Maths). Moreover, the increase in teaching staff and space enabled by the Design Tripos will be beneficial to other degree programmes run by the Department of Architecture, particularly the B.A. (Hons) Architecture Tripos. Sharing of some optional papers between the Architecture and Design Triposes will be beneficial to students in both Triposes.
- 11. The Design Tripos bridges strengths among current Cambridge Tripos offerings and looks to the future to address creativity-driven learning and collaboration opportunities for students, staff and the wider community. There are a number of reasons for introducing this Tripos:
 - (a) The Design Tripos offers a blend of humanities, science and technical education that is not currently available at Cambridge. At both application and throughout existing Triposes there are creative students who would like more technical content, and technical students who would like more design freedom. Cambridge Admissions Office market research and an A-level student survey conducted at the 2019 Royal Society Summer Science Festival suggests students are interested in such an interdisciplinary offering at Cambridge.

- (b) The Tripos will positively address widening participation (WP) and gender disparity in the field of engineering. UCAS data for Architecture and Engineering indicate that non-White UK intake is high nationally; almost 40% of students in these subjects are Black and Minority Ethnic (BAME). The Design Tripos will require a robust and broad set of excellent A-Level results, and will not be limited to, for example, Physics (in which only 20% of students are female) and Further Maths (in which the number of male students is twice the number of female students). Over the last three years, the Engineering and Natural Sciences (Physical Option) Triposes at Cambridge have had less than 40% female applications. Architecture, Engineering and Natural Sciences at Cambridge are over-subscribed at application so there is a wide pool of talented possible students.
- (c) Extensive competitor analysis found that there is significant scope for such a new course in the UK and specifically at Cambridge. While there are similar programmes in the UK, none have been explicitly constructed in the way that the Design Tripos has, and no other UK University appears to be offering this combination of disciplines as a single degree programme. The Design Tripos is a stronger mix of humanities with technology and science, which is why it is located in the School of Arts and Humanities.
- (d) Commissioned market research revealed that employers confirm a desire for inter/multidisciplinary knowledge, soft skills and team working; the Design Tripos also responds to the hybrid jobs of the future and the global challenges of the future.
- 12. The programme outcomes have been informed by Quality Assurance Agency subject benchmarking information for Architecture, Engineering, and Art and Design. The programme will set out to achieve accreditation from professional associations in Architecture (Architects Registration Board / Royal Institute of British Architects), Engineering (Joint Board of Moderators), Materials

- (Institute of Materials, Minerals and Mining) and Design (Institute of Engineering Designers). ARB / RIBA and JBM have welcomed the new course. Accreditation in Architecture would lead to exemption from Part I, while accreditation in any of the other disciplines would lead to Chartered Engineer status (CEng). Dual accreditation of the Design Tripos will attract a wide pool of home and international students, and significantly improve their employability and professional options. For reference, the B.A. (Hons) Architecture degree leads to Part I exemption only, while the new M.Arch. course (two further years of study after the B.A. (Hons)) leads to Part II exemption.
- This also informs the undergraduate fees for the Design Tripos, which have been calculated by indexing the fees for Engineering, Architecture and Natural Sciences, and taking 1/3 of each category. Engineering and Science courses also attract higher overseas fees than Architecture a blend of the rates is used. The eventual dual accreditation in Engineering and Architecture justifies charging the higher fee only, so a blended rate is a conservative assumption. Students admitted to the course will be eligible for student loans and grants from the Student Loans Company in the same way as other undergraduate students.
- 13. The curriculum for the Design Tripos is structured around a series of core studio projects where the focus is to apply multidisciplinary design techniques through hands-on problem-based learning. The thematic design studios and embedded core modules on professional skills development across the four years of the course provide a formal basis for skills and knowledge application and professional development in work-based contexts and real-world problems. These studios will complement taught courses that deliver fundamental concepts in the Humanities, Social and Natural Sciences, and Mathematics. Part IA and IB focus on fundamental papers in the context of design, with 25% of teaching in design studios. In Parts IB and IIA, students can choose from a selection of complementary optional papers aligned with their interests. Parts IIA and IIB further develop the integration of Arts, Sciences and Engineering in core subjects and the design studio as 50% of teaching, with a year-long dissertation in the fourth year as a capstone exercise to specialise.

14. The General Board recommends:

- I. That a Design Tripos be established with effect from 1 October 2024, with regulations as set out in Annex I of this report.
- II. That the degree of Master of Design be established with effect from 1 October 2024, with regulations as set out in Annex II of this Report.
- III. That, if Recommendation II is approved, consequential amendments be made to Ordinances with effect from 1 October 2024, as set out in Annex III.

22 July 2021	Stephen Toope, Vice-Chancellor	Tim Harper	Anna Philpott
	Zaynab Ahmed	NICHOLAS HOLMES	RICHARD REX
	Kristine Black-Hawkins	Amelia Jabry	Graham Virgo
	Ann Copestake	PATRICK MAXWELL	CHRIS YOUNG
	JOHN DENNIS	Nigel Peake	

DESIGN TRIPOS¹

GENERAL

- 1. The Design Tripos shall consist of four Parts: Part IA, Part IB, Part IIA, and Part IIB. A separate class-list shall be compiled for each Part.
- 2. No student shall be a candidate for more than one Part, or for any Part and also for another Honours examination, in the same term; and no student who has been a candidate for any Part shall again be a candidate for the same Part.
- **3.** To conduct the examination in each Part the Faculty Board of Architecture and History of Art shall nominate such number of Examiners as they shall deem sufficient. The Board shall have power to nominate Assessors to the Examiners for any of the papers. The Assessors shall be responsible for setting the questions in the subject or subjects assigned to them and for advising the Examiners on the candidates' performance in those questions. In each Part of the Design Tripos the questions proposed by each Examiner or Assessor shall be approved by the body of Examiners, or by a sub-group of those Examiners as nominated by the Chair of Examiners.
- **4.** In each Part the names of the candidates who obtain honours shall be arranged in three classes, of which the second shall be divided into two divisions. The names in the first and third classes and in each division of the second class shall be arranged in alphabetical order. A mark of distinction may be affixed to the names of those candidates placed in the first class whose work either in a part or in the whole of the examination is of special merit.
- **5.** The dates for submission of studio-work in all parts shall be published by the Faculty Board not later than the beginning of the Full Michaelmas Term next preceding the examination. Detailed instructions regarding the submission of studio-work shall be issued by the Department, not later than the division of the Michaelmas Term preceding the examination.
- **6.** In all Parts the teachers under whose direction the work was performed shall present to the Examiners detailed reports on the performance of each candidate in the coursework. The form and conduct of the coursework for each paper shall be published by the Faculty Board not later than the beginning of the Full Michaelmas Term next preceding the examination.
- 7. Students choose options in Section C in Part IB and in Part IIA. Not later than the Division of Easter Term each year the Faculty Board shall give notice of the approved lists of options prescribed for the examination to be held in the academic year next following, and shall specify the mode of assessment for each option. In giving such notice the Faculty Board shall announce combinations of options which satisfy the qualifying conditions for relevant professional registrations. The Board shall have power to announce restrictions on the combination of papers that a candidate may choose to offer. A candidate shall not offer in any part of the Tripos a paper that they have previously offered in another University Honours examination.

PART IA

- 8. The following may present themselves as candidates for honours in Part IA:
- (a) a student who has kept one term, provided that three complete terms have not passed after their first term of residence:
- (b) a student who has obtained honours in another Honours Examination in the year next after so obtaining honours, provided that the student has kept four terms and that nine complete terms have not passed after their first term of residence.
- 9. The examination for Part IA of the Design Tripos shall consist of two sections:

Section A. Studio-work.

Section B. Five papers as follows:

Paper 1.1: Professional skills I.

Paper 1.2: Materials and fabrication I.

Paper 1.3: History and theory of design I.

Paper 1.4: Form and forces I.

Paper 1.5: Mathematics and programming I.

¹ These regulations will come into effect in accordance with the timetable in Temporary Regulation 22, p. [000].

- 10. A candidate for Part IA shall be required:
- (a) for Section A, to present to the Examiners a portfolio of studio-work carried out during the current academic year;
- (b) to offer all papers in Section B. Papers 1.1–1.5 shall each be examined either by coursework or by a combination of a written paper of one and a half hours' duration and coursework.

PART IB

- 11. The following may present themselves as candidates for honours in Part IB:
- (a) A student who has obtained honours in Part IA of the Design Tripos may be a candidate for honours in Part IB in the year next after so obtaining honours, provided that they have kept four terms;
- (b) A student who has obtained honours in Part IA of the Architecture Tripos may be a candidate for honours in Part IB of the Design Tripos in the year next after so obtaining honours, provided that they have kept four terms, and that they offer Paper 1.5 (Mathematics and programming I) as one of their Part IB options in Section C.
- 12. The examination for Part IB of the Design Tripos shall consist of three sections:

Section A. Studio-work.

Section B. Four papers as follows:

Paper 2.1: Professional skills II.

Paper 2.2: Materials and fabrication II.

Paper 2.3: History and theory of design II.

Paper 2.4: Form and forces II.

Section C. A list of optional papers in Technical, Humanities and Integrated subjects, as announced by the Faculty Board under Regulation 8.

- 13. A candidate for Part IB shall be required:
- (a) for Section A, to present to the Examiners a portfolio of studio-work carried out during the current academic year;
- (b) to offer all papers in Section B;
- (c) to offer three papers in Section C. Candidates who present themselves under Regulation 11(b) shall be required to offer Paper 1.5 (Mathematics and programming I).

Papers in Sections B and C shall each be examined either by coursework or by a combination of a written paper of one and a half hours' duration and coursework.

PART IIA

- **14.** A student who has obtained honours in Part IB of the Design Tripos may be a candidate for honours in Part IIA in the year after so obtaining honours, provided that they have kept seven terms and that twelve complete terms have not passed after their first term of residence.
 - 15. The examination for Part IIA of the Design Tripos shall consist of three sections:

Section A. Studio-work.

Section B. Paper 3.1: Professional skills III.

Section C. A list of optional papers in Technical, Humanities and Integrated subjects, as announced by the Faculty Board under Regulation 8.

- 16. A candidate for Part IIA shall be required:
- (a) for Section A, to present to the Examiners a portfolio of studio-work carried out during the current academic year;
- (b) to offer the paper in Section B;
- (c) to offer five papers in Section C.

Papers in Sections B and C shall each be examined either by coursework or by a combination of a written paper of one and a half hours' duration and coursework.

PART IIB

- 17. A student who has obtained honours in Part IIA of the Design Tripos may be a candidate for honours in Part IIB in the year after so obtaining honours, provided that they
 - (a) have attained a satisfactory standard, as defined by the Faculty Board, in previous Honours Examinations;
 - (b) have not proceeded to the B.A. Degree;
 - (c) that fifteen complete terms have not passed after their first term of residence.

18. The examination for Part IIB of the Design Tripos shall consist of three sections:

Section A. Studio-work.

Section B. Paper 4.1: Professional skills IV.

Section C. A dissertation, or a project or alternative exercise of equivalent scope and standard approved by the Faculty Board, on a subject approved by the Faculty Board.

- 19. A candidate for Part IIB shall be required:
- (a) for Section A, to present to the Examiners a portfolio of studio-work carried out during the current academic year;
- (b) to offer the paper in Section B;
- (c) for Section C, to offer a dissertation, or a project or an equivalent exercise approved by the Faculty Board, in accordance with provisions of Regulation 21. A list of projects and of subject areas for dissertations and exercises, and details of the requirements for their submission, shall be published by the Faculty Board not later than the first Friday of Full Michaelmas Term in the year in which the examination falls.
- **20.** (a) A dissertation offered under Regulation 19(c) shall be of not less than 5,000 words and not more than 7,000 words in length, including footnotes and appendices, but excluding bibliography.
- (b) The examination may include, at the discretion of the Examiners, an oral examination on the dissertation and on the general field of knowledge within which it falls, and on the other work submitted as part of the examination.
- 21. If at the first attempt a candidate in any Part fails to satisfy the Examiners in any components of the examination which are required for professional accreditation, but nevertheless achieves marks that would otherwise qualify them for honours in that Part, they shall at the discretion of the Examiners be eligible for re-examination in any such components under conditions set by the Faculty Board. If the candidate succeeds in satisfying the Examiners in any such re-examination, they become eligible for the award of honours, but their original marks for that Part remain unchanged.

TEMPORARY REGULATION

22. The examinations for the Design Tripos shall be held for the first time as follows:

Part Ia in 2025

Part IB in 2026

Part IIA in 2027

Part IIB in 2028

Annex II

MASTER OF DESIGN (M.Des.)

On completing the requisite number of terms, a student who has obtained honours in Part IIB of the Design Tripos shall be entitled to proceed to the M.Des. Degree.

Annex III

Consequential changes to Ordinances

If Recommendations I and II are approved, the following changes will be made to Special Ordinance and Ordinance:

- (i) Special Ordinance B (i) (Statutes and Ordinances, p. 72): by adding 'Master of Design' to the list of primary degrees in Section 1.
- (ii) By adding a reference to the degree of Master of Design in the following regulations:
 - (a) Ordinance on Residence and Precincts of the University (Statutes and Ordinances, p. 172): Regulation 8(a);
 - (b) Ordinance on the Presentation and Admission of Candidates for Degrees (*Statutes and Ordinances*, p. 175): Regulation 15, after the reference to the M.Math. Degree;
 - (c) General Regulations for Examiners and Assessors (*Statutes and Ordinances*, p. 253): Regulation 9 and paragraph (c) of the Schedule;
 - (d) Ordinance on Payments to Examiners and Assessors (Statutes and Ordinances, p. 254): Regulation 3(a).

- (iii) By amending the Ordinances for Academical Dress (Statutes and Ordinances, p. 181) as follows:
 - (a) In the regulations for Black Gowns, by adding before the entry for the M.Math. Degree: 'M.Des.: the M.A. gown but with a circle of cord on the sleeve with a button in the centre;';
 - (b) In the regulations for Hoods, by adding before the entry for the M.Math. Degree: 'M.Des.: the M.Eng. hood but with a part lining of white silk four inches (10 cm) deep;'.
- (iv) By amending the Ordinance for Admission to Degrees (Statutes and Ordinances, p. 174) as follows:
 - (a) By inserting reference to the Master of Design in the Forms of Presentation for Degrees, before the reference to Business Administration.
 - (b) By inserting the following in the Schedule to the Forms of Admission to Degrees, before the reference to the M.Math. Degree:

For the M.Des. Degree

Magistri in Rebus Designandis

(v) In the Ordinance on the Order of Seniority of Graduates (*Statutes and Ordinances*, p. 180): by inserting a reference to the Masters of Design after the Masters of Engineering.

OBITUARIES

Obituary Notice

Sir Nicholas Proctor Goodison, M.A., Ph.D., FSA, (Hon.) FRIBA, (Hon.) FBA, Honorary Fellow of King's College and Honorary Keeper of Furniture in the Fitzwilliam Museum, died on 6 July 2021, aged 87 years.

GRACES

Graces submitted to the Regent House on 29 July 2021

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**, **6 August 2021**. Further information on requests for a ballot or the amendment of Graces is available to members of the Regent House on the Regent House Petitions site.§

- 1. That, on the nomination of the Council and notwithstanding Regulation 1 of the Ordinance on the University Advocate (*Statutes and Ordinances*, p. 697), Mr JEREMY LLOYD CADDICK, of Emmanuel College, be appointed University Advocate for one year from 1 October 2021.
- **2.** That the recommendations in paragraph 8 of the Joint Report of the Council and the General Board, dated 23 June 2021, on the discontinuation of the public display of class-lists and other matters (*Reporter*, 6623, 2020–21, p. 715) be approved.²
- **3.** That in the regulations for the Janeway Fund for Economics (*Statutes and Ordinances*, p. 878), a new sentence be added at the end of Regulation 2 and a new sub-paragraph (*e*) be inserted in Regulation 3, to read as follows:³
 - [2.] The Faculty Board of Economics may appoint a Director of the Fund in accordance with University recruitment procedures.
 - [3,] (e) the payment of the costs of the Director of the Fund appointed by the Faculty Board provided that
 - (i) there is sufficient income after Regulations 3(a) to 3(d) are applied; and
 - (ii) the amount of the payment to the Director of the Fund has been approved under the Ordinance for Payments Additional to Stipend or otherwise duly authorised under Statute or Ordinance; and
 - (iii) any remuneration in respect of the Director of the Fund's services in that capacity and the cost of any such remuneration is expressly authorised by the Managers, including national insurance and pension contributions and any indirect costs which may be charged to the income of the Fund; and
 - (iv) where the Director of the Fund is also a Manager of the Fund, that person is not involved in the decision whether or not to pay the costs of the Director from the Fund under this regulation.
- ¹ The Council has agreed to nominate Mr Caddick, currently one of the two Deputy University Advocates, to serve as University Advocate for the 2021–22 academic year in place of Dr Steinfeld, who is taking a period of research leave over the same period.
 - ² See the Council's Notice on p. 786.
- ³ The Council, on the recommendation of the General Board and with the support of the donor, is proposing a change to the regulations governing the Fund to permit the income to be used to support a Director of the Fund.
 - § See https://www.governance.cam.ac.uk/governance/key-bodies/RH-Senate/Pages/RH-Petitions.aspx for details.

ACTA

Congregations of the Regent House on 23 and 24 July 2021

FRIDAY, 23 JULY 2021

A Congregation of the Regent House was held at 10 a.m.

The following degrees were conferred:

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SATURDAY, 24 JULY 2021

A Congregation of the Regent House was held at 10 a.m. All the Graces submitted to the Regent House (*Reporter*, 2020–21: 6626, p. 762 and 6627, p. 780) were approved.

The following degrees were conferred:

This content and pages 825–829 have been removed as they contain personal information.

This content has been removed as it contains personal information.

E. M. C. RAMPTON, Registrary

END OF THE OFFICIAL PART OF THE 'REPORTER'

COLLEGE NOTICES

Elections

King's College

Elected to an Ordinary Fellowship with effect from 1 September 2021:

Sebastian Eves van den Akker, B.Sc., Ph.D., Leeds

Elected to an Ordinary Fellowship with effect from 1 October 2021:

Guilia Boitani, B.A., M.A., *Rome*, Ph.D., *PEM* Mira Siegelberg, B.A., *Columbia*, A.M., Ph.D., *Harvard*

Elected to a Research Fellowship with effect from 1 October 2021:

Patrycja Kozik, B.Sc., *Jacobs University Bremen*, Ph.D., *DAR*

Vacancies

Christ's College: Stipendiary Junior Research Fellowships (two available) in specified areas of the Arts, Humanities and Social Sciences; tenure: four years (non-renewable) from not later than 1 October 2022; stipend: £25,217 (with Ph.D.) or £20,675 (without a Ph.D.); closing date: 21 October 2021 at 12 noon; further details: https://www.christs.cam.ac.uk/jrf

Non-Stipendiary Junior Research Fellowship in the Physical Sciences, Technology, Arts, Humanities or Social Sciences; tenure: at least two years and not more than four years from 1 October 2022; closing date: 1 December 2021 at 12 noon; further details; https://www.christs.cam.ac.uk/vacancies-christs-college

Churchill College: Sydney Harvey Junior Research Fellowship (early career) in the Sciences, Technology, Engineering or Mathematics; tenure: up to three years from 1 January 2022; non-stipendiary but collegiate benefits apply; closing date: 1 October 2021; further details: https://www.chu.cam.ac.uk/about/master-fellows/early-career-research-fellowships/sydney-harvey-fellowship/

Fitzwilliam College: Bye-Fellowships (up to seven available) in any field (especially Archaeology, the Biological Sciences, Chemical Engineering, Computer Science, Electrical Engineering and Information Engineering, the Human, Social and Political Sciences, Land Economy and Law); tenure: from 1 October 2021, renewable annually; benefits: SCR membership, dining rights, enhanced supervision payment; closing date: 23 August 2021 at 12 noon; further details: https://www.fitz.cam.ac.uk/vacancies/academic

Hughes Hall: President; tenure: from 1 October 2022; closing date: 23 August 2021; further details: https://www.minervasearch.com/hugheshall and https://www.hughes.cam.ac.uk/

Peterhouse: Research Fellowships 2021; tenure: three years from 1 October 2022; closing date: 13 September 2021; further details: https://www.pet.cam.ac.uk/resfell

Queens' College: Junior Research Fellowships; tenure: from 1 October 2022; stipend: from £29,176 plus benefits; closing date: 17 September 2021 at 12 noon; further details: https://www.queens.cam.ac.uk/about-us/academic-staff-vacancies

Trinity Hall: Postdoctoral Research Associateships (around ten available); tenure: usually two years from 1 October 2021 (renewable), and co-terminous with postdoctoral employment; closing date: 6 September 2021; further details: https://www.trinhall.cam.ac.uk/about/yacancies/

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