School of Technology

Council of the School

2.00 p.m. on Friday, 31 January 2020

Large Meeting Room,
Department of Chemical Engineering and Biotechnology

UNRESERVED MINUTES

Present:	Professor John Dennis (Chair)
	Professor Richard Prager
	Professor Lisa Hall
	Professor Ann Copestake
	Professor Christoph Loch
	Dame Polly Courtice
	Dr Stella Pachidi
	Professor Alastair Beresford
	Professor Alexandra Routh
	Professor Holger Babinsky
	Professor Simon Guest
	Professor Tim Minshall
	Professor Simon Godsill
	Professor Richard Penty
	Dr Patrick Barrie
	Professor Garth Wells (School observer)
	Dr Shui Lam (Secretary)
	Ms Joanna Walmsley (School Finance Manager)
	Dr Ann Thompson (Research Strategy Facilitator)
In Attendance:	Professor Graham Virgo, Mr Michael Cresswell and Ms Isobel Humphrey attended for item 3.1; Ms Daniela Manca for item 3.2; Ms Tracy Brooks throughout.
Apologies:	Professor Robin Langley and Professor Andrew Flewitt

Professor Dennis welcomed Dr Pachidi to the meeting as a new member.

Declarations of interest
There were no declarations of interest.

1. <u>**Minutes**</u>

The minutes of the meeting held on 29 November 2019 were approved.

1.1. <u>**Membership of the Council of the School**</u>

Paper **T/20/1** which gave the membership of the Council of the School with the student representatives was noted.

<u>**Matters arising**</u>
There were no matters arising.

<u>**Chair's report**</u>

The Head of School provided a verbal report:
1. The University Strategy and Planning Workshop on the size and shape of the student population meeting took place and Head of School did comment on the high ratio of Technology undergraduate applicants to places.
2. Congratulations were given for the recent awards to Professor Neely, Pro-Vice-Chancellor for Enterprise and Business Relations for his OBE, and Professor Gladden for her DBE.
3. Dame Courtice and CISL convened a high-level meeting on decarbonisation in the Whittle Laboratory for HRH the Prince of Wales and leading industry figures. Dame Courtice, Professor Miller and their teams were congratulated and thanked for ensuring that the event was highly successful.
4. The University internal call for a round of funding to support two new Strategic Research Initiatives (SRIs) would be issued imminently.
5. Further progress is being made in facilities sharing, of equipment, technical support capacity and design and workshop facilities with the School of Physical Sciences. The aim is to provide first class facilities and ongoing technician training and development.

The Deputy Head of School provided a verbal report:
1. The research themes and support requirements for large funding proposals suggested by Deputy Heads of Department (Research) will be discussed at the next School Research Committee meeting.
2. Further information on the SRI call mentioned above: A SRI Theme should involve a number of Schools, and generate activities which can provide the basis for a large Government funding bid. The two most promising themes for the School are Quantum and Decarbonisation. Anyone who requires help or advice as to the SRI call should contact Professor Penty.
3. Anyone who is interested in submitting an application for a Leverhulme PhD Scholarship programme which provides part-funding for 15 PhD students over 6 years in the areas supported by the Leverhulme Trust should contact Dr Thompson.

Dr Barrie reported that there had been no substantial developments related to Teaching but he can provide specific feedback upon request to individuals.

2.   Starred Items

The Committee approved the starred items.

3.   Strategic Business

3.1.   Technology-Enabled Learning (TEL)/Digital Education

Professor Virgo (the Senior Pro-Vice-Chancellor), Mr Michael Cresswell (Head of Online Learning Services at Cambridge University Press) and Ms Isobel Humphrey (Strategic Projects Lead) attended the meeting to discuss Technology-Enabled Learning (TEL)/Digital Education (**Paper T/20/2**). The presentation shared information about the University's emerging strategy for TEL, with an intention to gauge and develop interest among Departments, and to engage with issues or concerns raised by Schools and Heads of Department.

The TEL initiative is working closely with Cambridge University Press in development of University of Cambridge online courses, sponsored by the General Board Education Committee, with its own Development Board. Initial stages have scoped the resources and capabilities and activities across the University related to digital learning, as well as existing Digital offerings across other Higher Education Institutes (HEIs). Following the review any pilot schemes will be evaluated prior to an anticipated five-year framework for TEL across the University.

The aim is to use technology to improve learning outcomes with course design determining the appropriate platform or technology. Online learning contributes significantly to the increasingly important agenda in widening access and participation in Higher Education.

Challenges of engaging students online are being addressed with Cambridge Assessment and the Disability Resource Centre, and opportunities to work with "Open Scale" providers are being explored such as edX edge campus facing platform for online lecture content.

 The University is maintaining its primary residential model of degree courses but recognises that certain online courses can support core degrees, such as induction and online networking prior to start of a degree course, professional development or certain educational certificates. Blended learning may be a future aim, with online courses elements supplemented by a residential element, or online certificates leading to residential courses. The risk of maintaining an exclusively residential degree model is that the numbers of students will remain strictly limited by the residency requirement in the face of other HEIs offering online degrees that are more accessible for a wider number and range of students.

It was noted that the professional courses offered by CISL, the Judge Business School Executive Education and Department of Engineering's Institute for Manufacturing Education and Consultancy Services (IfMECS) have well

developed online learning platforms and sources to support these. TEL is offering support to Departments to address their needs and identify tailored online learning options.

A concern was raised regarding if the 3 year pilot agreement with edX would risk the University becoming locked into their online platform. The Council of the School was informed that the risk was low, and edX is compatible with CISL's and JBS's existing online platforms.

The TEL programme is now seeking funding from the University to support new projects from Transition & Widening Participation to Professional and Executive Education, as well as to refresh and improve existing taught programmes. The deadline for expressions of Interest is expected to be May/June 2020. The first step is to contact Mr Michael Cresswell for information or questions.

Professor Virgo, Mr Michael Cresswell and Ms Isobel Humphrey were thanked for their contributions and left the meeting.

3.2. West Cambridge Draft Academic Strategy

The West and North West Cambridge Academic Board has approved the draft outline of the West Cambridge academic strategy (**Paper T/20/3**) to go out for wider consultation. Ms Daniela Manca, the Secretary of the Board, attended the meeting to discuss the draft strategy with the Council of the School and share the strategy with the affected Departments.

It was reported that the survey of academic, technical and support staff based on the West Cambridge site identified that there was little sense of being with staff having a feeling of being "stuck out there". Two working groups have been established, one for communications to promote and connect the activities within the Departments based on the West Cambridge site, and the other to promote sharing of space, opportunities and facilities.

While it was important to have a vision, the Council of the School was of the opinion that strategies should be developed, step by step, that could provide the "basics", rather than looking to "deliver absolute excellence" in a leap. General catering provision, particularly enabling undergraduates to eat between lectures, and better wayfaring and signposting around the site were also identified as immediate needs. The Council approved the strategy but requested that it might be drafted more succinctly, conveying the key components of the strategy at the start of the document.

4. Regular Business

4.1. Machine Learning/AI

At the meeting, the Head of the Department of Computer Science and Technology, Professor Copestake, reported on the developing strategy to

expand the use of machine learning/AI in the University (Paper **T/20/4**). The strategy has been discussed with the Vice-Chancellor, the Strategy and Planning Committee. The Council of the School was asked to consider and approve the draft proposal prior to its submission to central committees for approval.

Professor Copestake reported that she has been given informal feedback that a related proposal to the Schmidt Foundation for $10m had been approved. However the University Teaching Officers (UTOs) required for the expansion could not be funded by the donation; hence the proposal to the University. It was agreed that an ML/AI Leadership Group should include appropriate representation from acadmics involved in ML in the Engineering Department, since the proposal was a joint enterprise between the two departments.

The Council of the School endorsed the proposal.

4.2.   IT Governance and Guidelines

The School's IT Committees developed a summary in Paper **T/20/5** of its IT governance mechanisms and a set of guidelines for departments and institutions to ensure that their IT provision is fit for purpose. Much of this has been considered and approved by the Council of the School previously but has not previously been documented other than in the minutes of the Council of the School. Cyber security is a particularly key area as it is high on both the School and University risk registers and there are signs that the number and severity of attacks are increasing.

As well as bringing all this material together, the opportunity was taken to update the underlying thinking in line with the latest advice on best practice from the UIS and elsewhere, where necessary adding new material. The aim was to provide a guide for Heads of Department, senior IT staff and senior administrators, reminding them of the requirements for ensuring that their IT systems are fit for purpose and for reporting on this via the School to the University.

The Council of the School approved Paper **T/20/5**, and asked the School IT Committees to review this on an annual basis and seek the Council's approval for any significant additions or changes.

Approval of the cyber security strategy and having the key issues addressed will enable cyber security certification, although the dispersed geography of sites remains a challenge for implementation.

5.   Straightforward Business

5.1.   HR Briefing

The enclosed HR Briefing paper, prepared by the HR Business Manager, **(Paper: T/20/6)** was noted.

It was reported that the HR Business Manager submitted the School's responses to the HR consultations on academic titles and dual career pathways as discussed at the previous Council meeting. The School provided the highest number of responses regarding these; collated responses from across the University would be submitted to the next meeting of the central HR committee, of which Professor Prager is a member.

Pending review following the successful legal challenge to the EJRA at the University of Oxford, any member of staff coming up for retirement who wishes to have an extension would need to submit their extension application to the School, as usual.

5.2. Health and Safety Matters

The Departments raised no Health and Safety matters.

5.3. Risk Assessment

The Council of the School assessed the risks of the decisions made at this meeting and decided not to amend the Risk Register.

6. ***Minutes of Other Committees

SnP Committee	21 January 2020	**T/20/7**
Graduate School Committee	7 November 2019	**T/20/8**

7. Any Other Business

This being her last meeting, Ms Walmsley, the Interim Finance Manager, was thanked for her contributions to the School.

8. Dates of Future Meetings 2019-20

2.00 p.m. in Room W2.01, Judge Business School:
Friday, 06 March 2020

2.00 p.m. in Board Room, Department of Engineering:
Friday, 08 May 2020

2.00 p.m. in FW11, Computer Laboratory:
Friday, 12 June 2020