

## ACADEMIC CAREER PATHWAYS: RESEARCH AND TEACHING

## Promotion Criteria for Progression to Professor (Grade 11) and Professor

### Research and Research Leadership: Professor (Grade 12)

Promotion to Professor at Grade 12 requires **outstanding achievement in research and research leadership assessed by reference to international levels of excellence**. This includes both individual and collaborative contributions to research, as well as contributions to leading an excellent institutional research culture. There are two criteria, described below, and outstanding achievement is normally required in both.

#### School Expectations, including balance of contribution across criteria:

The School of Technology expects excellence in research as a baseline. Below are some indicators of excellence in research and research leadership. These are not exhaustive and additional indicators may be offered to illustrate your suitability for Professorship. Applicants are encouraged to discuss their case with their Head of Department.

Expectations include:

- A world-leading position in the research field for original and high impact research contributions of both breadth and depth, and
- Evidence, which is endorsed by the unequivocal support of referees who are themselves top scholars in the field, of continuing outstanding contributions in research since the last promotion, teaching and researcher development and service.

***CRITERION 1 Consistently conducts rigorous research addressing significant questions, contributing new ideas and advancing the boundaries of the field whilst ensuring the highest standards of research integrity are promoted and maintained.***

#### School of Technology supplementary examples of indicators of excellence

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| <ul style="list-style-type: none"> <li>• Has an established international reputation in the subject area. Demonstrable intellectual leadership in the area.</li> <li>• Influences government and funding body policy.</li> <li>• Originality in research: Evidence of fundamental, world-leading research, ground breaking, lasting advances.</li> <li>• Progress since last promotion: Continued rising trajectory.</li> <li>• Appropriate Awards and Fellowships depending on the sub-discipline.</li> <li>• Consistent year-on year record of publication of high-quality papers and other appropriate outputs, with candidate making a major contribution where outputs are multi-authored.</li> </ul> | <ul style="list-style-type: none"> <li>• Invited to deliver keynote lectures at major international conferences.</li> <li>• Publication record: Quality in recognised peer reviewed journals or conferences, as appropriate to the area of research.</li> <li>• Invited talks: Significant in nature.</li> </ul> |
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***CRITERION 2 Consistently provides high-quality research leadership, strategically planning for the future and supporting an inclusive and productive research culture***

School of Technology supplementary examples of indicators of excellence	
<ul style="list-style-type: none"> <li>• Active in international collaborations, resulting in high-quality publications or other appropriate outputs as a major contributor.</li> <li>• Transformational impact on the relevant industry or society.</li> <li>• Leading the organisation of a major Academic conference or symposia</li> </ul>	<ul style="list-style-type: none"> <li>• Research Group: Appropriately sized group producing excellent papers and training excellent students.</li> <li>• Industrial engagement / spin-out companies, NGO, charities and Community Interest Companies.</li> <li>• Serving on an editorial board and / or serving as the editor of a major journal.</li> </ul>

### Research and Research Leadership: Professor (Grade 11)

Promotion to Professor (Grade 11) requires **outstanding achievement in research and research leadership assessed by reference to national levels of excellence and international recognition**. This includes both individual and collaborative contributions to research, as well as contributions to institutional research culture. There are two criteria and outstanding achievement is normally required in both.

#### **School Expectations, including balance of contribution across criteria:**

The School of Technology expects excellence in research as a baseline. Below are some indicators of excellence in research and research leadership. These are not exhaustive and additional indicators may be offered to illustrate suitability for Professorship (Grade 11). Applicants are encouraged to discuss their case with their Head of Department.

Expectations include:

- A well-established position nationally and a growing international reputation in the research field, and
- Evidence, which is endorsed by the unequivocal support of referees who are themselves top scholars in the field, of continuing outstanding contributions in research since the appointment/last promotion, teaching and researcher development and service.

***CRITERION 1: Consistently conducts rigorous research addressing significant questions, contributing new ideas and advancing the boundaries of the field whilst ensuring the highest standards of research integrity are promoted and maintained.***

School of Technology supplementary examples of indicators of excellence	
<ul style="list-style-type: none"> <li>Has a well-established national and a growing international reputation in the subject area.</li> <li>Consistent year-on year record of publication of high-quality papers and other appropriate outputs, with candidate making a major contribution where outputs are multi-authored.</li> <li>Increasing evidence of invitations year on year to present at major conferences, with some keynote lectures.</li> </ul>	<ul style="list-style-type: none"> <li>Award of prizes and honours for research.</li> <li>Progress since last promotion: Rising trajectory.</li> <li>Appropriate Awards and Fellowships depending on the sub-discipline.</li> <li>Research grant funding: An appropriate level of funding gained through a suitable variety of sources.</li> <li>Publication record: Quality in recognised peer reviewed journals or conferences, as appropriate to the area of research.</li> <li>Invited talks: Status increasing.</li> </ul>
<b>CRITERION 2: Contributes to high-quality research leadership and supports an inclusive and productive research culture</b>	
School of Technology supplementary examples of indicators of excellence	
<ul style="list-style-type: none"> <li>Developing intellectual thought leadership which shows emerging ability to influence the international research agenda.</li> <li>Contributing towards the organisation of a major Academic conference or symposia</li> </ul>	<ul style="list-style-type: none"> <li>Research Group: Good sized group producing good quality papers and other outputs.</li> <li>Industrial engagement / spin-out companies, NGO, charities and Community Interest Companies.</li> <li>Involvement with Editorial Boards and / or in an editorial capacity in a journal.</li> </ul>

## Teaching and Researcher Development: All Applicants

All applicants are required to show that they have made an effective contribution towards the University's goal of providing high-quality research-led teaching to undergraduate and postgraduate students and fostering the professional development of research students and early career research staff. It is recognised that applicants may contribute in different ways at different points in their career and that effective contributions may differ between disciplines. Contributions will be assessed in the context of the relevant Department/Faculty's expectations, including the local workload model where applicable. In its guidance, each Department/Faculty should indicate the balance of expectation as between teaching (undergraduate/postgraduate) and researcher (PhD/Postdoc) development. An effective contribution must be shown by reference to all or some of the criteria below.

**School Expectations, including balance of contribution across criteria:**

The School of Technology expects that applicants should normally provide evidence under criteria one to three below. University Teaching Officers are expected to deliver consistently well-organised and clear teaching and research supervision. Teaching should be effective, innovative and provide a sound basis for further learning. It is also recognised that individuals can contribute in this area through other routes such as supporting and nurturing PhD students and other researchers.

A successful candidate will be expected to provide clear evidence, with the unequivocal support of the senior leadership of the Department, for example, by the Deputy Head of Department with responsibility for Undergraduate Education, of outstanding contributions to teaching with clear evidence of an innovative approach to Teaching and Teaching Development.

***CRITERION 1: Consistently delivers excellent teaching that benefits from and engages with Cambridge's research-rich environment and is intellectually challenging*****School of Technology supplementary examples of indicators of excellence**

- Takes a lead in setting and examining project work, laboratory or theoretical practical work etc.
- Responds effectively to student feedback and adapts and improves teaching materials as necessary.
- Is adaptable to teaching a range of material rather than being confined to a small area of expertise.
- Is an effective examiner e.g. sets relevant, unambiguous and appropriate questions, marks effectively.
- Acts as Chair of Examiners.

***CRITERION 2: Consistently delivers high-quality research supervision that is intellectually challenging and supportive*****School of Technology supplementary examples of indicators of excellence**

- Effectively contributes to the career development of research students.

***CRITERION 3: Consistently ensures that early-career researchers receive excellent opportunities to develop their potential and prepare them for future success.***

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### School of Technology supplementary examples of indicators of excellence

- Mentors and advises early career researchers, encouraging publication and fellowship applications.

## Service to the University and to the academic community: All Applicants

All applicants are required to show an **effective service contribution**. University members are expected to demonstrate and promote collegiality by nurturing a culture of mutual respect. The University recognises that individuals may contribute in different ways at different times and that as individuals become more senior they may be asked to take on more commitments that are external to the University. Nevertheless the University normally expects applicants to demonstrate a significant degree of service contribution that is internal to the University.

### School Expectations, including balance of contribution across criteria:

The School of Technology expects applicants to show an effective contribution and share the administrative burden, supporting the work of the relevant Department/Faculty. These indicators are not exhaustive and additional indicators may be offered to illustrate suitability for promotion. Applicants are encouraged to discuss their case with their Head of Department.

A successful candidate will be expected to provide clear evidence, with the unequivocal support of the senior leadership of the Department, for example, by the Head of Department, Head of Division, as appropriate, of outstanding contribution to the Department, University and externally to the academic community. Candidates are expected to achieve a balance of contribution that relates to both internal departmental/university duties and external professional service.

***CRITERION: Consistently makes an effective contribution of service to the University and to the academic community beyond the University. Promotes collegiality and engenders a culture of mutual respect.***

### School of Technology supplementary examples of indicators of excellence

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| <ul style="list-style-type: none"> <li>• Supports the Department to deliver a range of central University initiatives e.g. Athena Swan.</li> <li>• Directorship of a Research Centre or other major research activity etc.</li> <li>• Engages / leads in fundraising activities and initiatives.</li> <li>• Takes a leading role in committee work, e.g. as secretary or chair.</li> </ul> | <ul style="list-style-type: none"> <li>• Significant and sustained public engagement activity.</li> <li>• Professional body membership.</li> <li>• Serving on professional body committees.</li> </ul> |
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## Promotion Criteria for Progression to Associate Professor<sup>1</sup> (G10)

<sup>1</sup> For established academics, the title will be prefaced by 'University', subject to the approval of the Queen's Privy Council.

### Research: Associate Professor (G10)

An applicant is required to demonstrate achievement in research assessed by reference to national levels of excellence. This may include individual and/or collaborative contributions to research.

#### School Expectations, including balance of contribution across criteria:

The School of Technology expects excellence in research as a baseline; below are some indicators of excellence in research and research leadership. These are not exhaustive and additional indicators may be offered to illustrate suitability for the role of Associate Professor Senior Lectureship. Applicants are encouraged to discuss their case with their Head of Department.

***CRITERION: Consistently conducts rigorous research addressing significant questions, contributing new ideas and advancing the boundaries of the field, whilst ensuring the highest standards of research integrity are promoted and maintained.***

#### School of Technology supplementary examples of indicators of excellence

Appropriate metrics for successful research output might include:

- Publication in leading peer-reviewed journals.
- Publication of books.
- Publication of articles in conference proceedings.
- Delivery of papers at national/international conferences.
- External recognition of work such as invitations to give seminars and invited lectures and recognition by professional organisations.
- Funding of research proposals, especially those submitted to sources that use peer review and when the candidate is the principal investigator.
- Level of research activity as measured by the quality and number of graduate students and their progress, and
- Research leading to patents and/or industrial technology transfer.

### Teaching and Researcher Development: Associate Professor (G10)

An applicant seeking progression to Associate Professor (Grade 10) is required to show consistent and sustained excellence in providing high-quality undergraduate and postgraduate education that benefits from and engages with Cambridge's research-rich environment and/or nurturing the professional and personal development of research students and early career research staff. It is recognised that effective contributions may differ between disciplines and that an applicant's

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contribution is therefore to be assessed in the context of their Department/Faculty's expectations, including the local workload model where applicable. Sustained excellence must be shown by reference to all or some of the following criteria.

### **School Expectations, including balance of contribution across criteria:**

The School of Technology expects that applicants should normally provide evidence under criteria one to three below. Applicants are expected to deliver consistently well-organised and clear teaching and research supervision. Teaching should be effective, innovative and provide a sound basis for further learning. It is also recognised that individuals can contribute in this area through other routes such as supporting and nurturing PhD students and other researchers.

There must be clear evidence of a strong record of teaching competence at both undergraduate and graduate levels, the development of early career researchers, and of promise of continued contributions at the highest levels.

Standards for promotion are set at a level that promises to advance the quality of the Department's research and teaching relative to those at other internationally leading academic institutions.

### ***CRITERION 1: Consistently delivers excellent teaching that benefits from and engages with Cambridge's research-rich environment and is intellectually challenging***

#### **School of Technology supplementary examples of indicators of excellence**

- Responds effectively to student feedback and adapts and improves teaching materials as necessary.
- Is an effective examiner e.g. sets relevant, unambiguous and appropriate questions, marks effectively.

### ***CRITERION 2: Consistently delivers excellent research supervision that is engaging, intellectually challenging and supportive***

#### **School of Technology supplementary examples of indicators of excellence**

- Effectively contributes to the career development of research students.

### ***CRITERION 3: Consistently ensures that early-career researchers receive excellent opportunities to develop their potential and prepare them for future success.***

#### **School of Technology supplementary examples of indicators of excellence**

- Mentors and advises early career researchers, encouraging publication and fellowship applications.

### **Service to the University and Academic Community: Associate Professor (G10)**

An applicant is required to show an effective service contribution. University members are expected to demonstrate and promote collegiality by nurturing a culture of mutual respect. The University recognises that people may contribute in different ways at different times and that as individuals become more senior they may be asked to take on more commitments that are external to the



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University. Nevertheless, the University normally expects applicants to demonstrate some degree of service contribution that is internal to the University.

### **School Expectations, including balance of contribution across criteria:**

The School of Technology expects applicants to show an effective contribution and share the administrative burden, supporting the work of the relevant Department/Faculty. These indicators are not exhaustive and additional indicators may be offered to illustrate suitability for promotion. Applicants are encouraged to discuss their case with their Head of Department.

There are many different ways in which a candidate can demonstrate an effective service contribution. Candidates are expected to achieve a balance of contribution that relates to both internal departmental/university duties and external professional service. They are expected to respond to the departmental and institutional needs and to be flexible and cooperative in helping to achieve current goals and overcome challenges as they arise.

***CRITERION: Consistently makes an effective contribution of service to the University and to the academic community beyond the University. Promotes collegiality and engenders a culture of mutual respect.***

### **School of Technology supplementary examples of indicators of excellence**

- Supports the Department to deliver a range of central University initiatives e.g. Athena Swan.
- Demonstrable active participation in the work of Committees.
- Candidates are expected to demonstrate a balance of contribution that relates to both internal departmental/university duties and external professional service.