

# Schulich School of Engineering Faculty Guidelines

approved by

**Engineering Faculty Council** 

**March 2023** 

# Introduction

The Schulich School of Engineering (SSE) Faculty Guidelines have been created by adding SSE-specific guidance where appropriate within the GFC Academic Staff Criteria & Processes Handbook ("GFC Handbook"). The Part numbering of the GFC Handbook has not been altered. SSE-specific guidance is provided as text boxes to be inserted immediately following the relevant section in the GFC Handbook. In other words, a "SSE" text box applies to the Part with the corresponding number in the GFC Handbook. In the event of an unintended conflict or contradiction that arises because of the SSE-specific guidance and the GFC Handbook, the GFC Handbook content shall prevail.

To facilitate updates to the SSE Faculty Guidelines in response to future changes to the GFC Handbook, the official version of the SSE Faculty Guidelines is maintained and approved as a stand-alone document (this document) containing only the SSE-specific guidance. This document is intended to be read in conjunction with the current version of the Handbook. While this document is the official version, the SSE may maintain a merged version of the current GFC Handbook and the SSE Guidelines text as shown on the remaining pages of this document for ease of reference.

# **Preamble**

# Note:

The Schulich School of Engineering (SSE) Guidelines have been created by adding SSE-specific guidance where appropriate within the *GFC Academic Staff Criteria & Processes Handbook*. The content and Part numbering of the *Handbook* have not been altered. SSE-specific guidance has been added as text boxes immediately following the relevant section. In other words, a "SSE" text box applies to the Part immediately preceding it. In the event an unintended conflict or contradiction that arises because of the SSE-specific guidance and the Handbook, the Handbook content shall prevail.

# Part A - Definitions, Authority, Faculty Guidelines, Transitional Provisions

# **SSE A.3.1**

This annotated version of the *Handbook* (i.e., this document) serves as the SSE Faculty Guidelines referred to in this article.

# SSE A.3.7(i)

In support of greater diversity in possible career paths, the SSE recognizes and rewards diversity in competencies and talents. As such, the relative importance that the SSE attaches to the University functions of research and scholarship, teaching, and service shall be considered on a person-by-person basis and in the context of their workload.

# SSE A.3.7(ii)

These interpretations are described in the relevant sections below.

#### SSE A.3.7(iii)

The SSE values and encourages knowledge engagement and transfer, entrepreneurship, and innovation. These interpretations are described in the relevant sections below.

# SSE A.3.7(iv)

This is described in SSE B.1.1.3.

#### SSE A.3.7(v)

Expectations for competitive and other types of funding are to be interpreted in the context of the academic staff member's individual workload. The general expectations are described in SSE B.1.2.7. The expectations with respect to academic rank are described in Part B.2.

# SSE A.3.7(vi)

Professional responsibilities would normally be assessed as part of Service External to the University, as described below.

# SSE A.3.7(vii)

Assessment of contributions to service is described in Parts B.1.4 and B.1.5. Administrative duties are normally considered as contributions to service. At times, an academic staff member's time allocation to a leadership role may occur through either the Teaching or the Research and Scholarship function.

# SSE A.3.7(viii)

Assessment of information supplied within a Teaching Dossier is described below.

# SSE A.3.7(ix)

This is described in SSE B.4.2.3.

# SSE A.3.7(x)

Academic Staff are expected to build scholarly accomplishments over time, leading to a reputation of increasing excellence and expertise. The quality and impact of scholarly accomplishments as determined within an academic staff member's discipline and relative to an academic staff member's context should normally increase as one's career progresses. The requirements for Academic Staff are described in Part B.2.

# SSE A.3.7(xi)

This is described in SSE B.2.2.1 and SSE B.2.5.1.

# **SSE A.3.7(xii)**

This is described in relevant sections below.

# SSE A.3.7(xiii)

The SSE values appointments across multiple units and recognizes that the criteria may vary across units. The criteria in this document are to be applied consistently for all academic staff members and contextualized in accordance with each individual's personal context, disciplinary context, Workload Assignment, rank and stream as described in detail in relevant sections below.

# **SSE A.3.7(xiv)**

Activities carried out in other departments and the university will be valued equally to similar contributions within SSE. At the same time, academic staff members are expected to contribute collegially to departmental and faculty activities.

# SSE A.3.7(xv)

The SSE recognizes academic staff members have diverse career paths. This document ensures career progression and merit assessment is inclusive of diversity in demonstrating academic excellence.

# SSE A.3.7(xvi)

This is described in SSE C.2.1.

# SSE A.3.7(xvii)

This is described in SSE C.3.1.2.

# SSE A.3.7(xviii)

This is described in SSE C.3.1.2.

# Part B - Criteria for Appointment, Renewal, Transfer, Tenure, Promotion, and Merit Assessment

#### SSE B.1.1.3

The nature of research, scholarship, teaching and service will further vary by individual, based on their FTE, Department, scholarly field and individual circumstance.

#### SSE B.1.1.4

Certain types of academic contributions require careful development and maintenance of community relationships (including Indigenous, racialized, and other vulnerable populations) which demand significant time and focus. In such cases, it is anticipated that previous indicators of contribution (such as publications and teaching events) may not be immediately apparent despite excellence by academic staff members in conducting such academic work. Accordingly, any review or assessment of such activities will be conducted recognizing the required investment of time on community relationships.

#### SSE B.1.2.6

Academic staff members are required to meet ethical standards for Research and Scholarship, to adhere to University policies with respect to ethical conduct, and to act with integrity and honesty in conducting and communicating their scholarly work.

#### SSE B.1.2.7

All Teaching and Research stream faculty are expected to actively pursue funding opportunities to support their research and scholarship activities. The basic expectation for Teaching and Research stream faculty is NSERC Discovery Grant or equivalent. Teaching and Research stream faculty should also hold other competitive, peer-reviewed grants (e.g., NSERC, CIHR, SSHRC as appropriate).

There is no research funding expectation for Teaching-Focused stream faculty.

#### **SSE B.1.2.8**

Publications are expected. Academic staff members should be able to demonstrate the impact of their publications: e.g., the choice of journal/conference, citations, uptake.

#### SSE B.1.2.9

The SSE recognizes that contributions to the engineering profession, including outside professional activity, demonstrates engagement with the professional engineering community and contributes to maintaining currency as professional engineers.

#### **SSE B.1.3.6**

Educational Leadership is highly valued by the SSE. In general, pedagogical innovations that are shared beyond an academic staff member's teaching and learning environment should be considered contributions to Research and Scholarship. Similarly, the "sharing of pedagogical expertise through publications" described in this section would normally be reported within Research and Scholarship.

#### SSE B.1.4.6

Academic staff members are expected to increase the quality, impact, and/or scope of their Service contributions over time. Provincial, national and international leadership roles are generally encouraged for academic staff members to take on.

#### **SSE B.1.5**

Administrative duties and leadership are recognized under Service (Internal to the University of Calgary).

#### **SSE B.2.1.2**

Academic staff will be reviewed for Tenure, Promotion, and Merit Assessment according to the quality and impact of their academic contributions as a whole. The review will be considered in the context of their assigned duties, and their personal and scholarly contexts. It is expected that academic staff members' contributions should be commensurate with peers of equivalent academic rank and stream. Statistical comparators within Schulich School of Engineering and with top Canadian Engineering schools will be available as separate documents to provide a basis of comparison.

#### SSE B.2.2.1

To be considered for appointment in the Teaching and Research stream in the Schulich School of Engineering a candidate shall normally hold at least one of a PhD or other doctoral degree and be eligible for registration as a Professional Engineer (PEng) in the Province of Alberta. Under exceptional circumstances, individuals holding other graduate degrees and/or critical experience and expertise will be considered for appointment. Professional registration is an expectation that is linked to professional program accreditation. The expectation changes with stage of career: i.e., Assistant Professor (eligible), Associate Professor/tenure (registered or in the process of registering), Professor (registered).

#### SSE B.2.3.2

Additional examples include:

ix. registered or in the process of registering as a Professional Engineer (PEng) in the Province of Alberta,

# SSE B.2.3.3

Additional examples of research and scholarship indicators include:

- holding an NSERC Discovery Grant or equivalent,
- holding other competitive external grants (e.g., NSERC Alliance, Alberta Innovates, industry grants and/or contracts, etc.),
- holding internal grants (e.g., URGC, etc.),
- publication of peer-reviewed journal papers,
- publication of peer-reviewed conference papers,
- publication of peer-reviewed book chapters,
- presentation of research at national and international conferences,
- provision of open-source software,
- provision of research results to NGOs or government agencies that benefit the public good,
- engagement in community-based research (e.g., reports or briefs, presentations, formal partnerships, research relationship documents),
- media engagement (such as interviews with news agencies),
- commercialization of technology through licensure or a spin-off/start-up company (patents/disclosures).

# SSE B.2.3.4

Additional examples of teaching indicators include:

- successful supervision of HQP (highly qualified personnel): i.e., primary or co-supervision of PhD students, primary supervision and completions of MSc students, successful supervision and completion of undergraduate summer research students, a record of publications with HQP,
- use of a range of appropriate teaching and learning methodologies,
- supporting students outside the classroom (e.g., mentoring, student clubs and teams),
- advising capstone design teams,
- field and practicum supervision,
- evidence of supporting student success (e.g., student feedback on instruction, student achievement of course learning outcomes),
- teaching awards,
- engagement in evidence-based reflective teaching practices,
- participation in teaching triads,
- participation in national or international engineering education societies/associations,
- participation in teaching and learning workshops/courses.

## SSE B.2.3.5

Additional examples of service indicators include:

- active participation in internal (Department, School, and/or University) committees,
- active participation in ad hoc Departmental, School, and University task forces,
- participation in peer review of articles (conference and/or journal),
- active participation on national and international journal editorial boards,
- active participation on professional societies (e.g., IEEE, CSME, CEEA-ASEG, etc.),
- active participation on professional engineering committees (e.g., CEAB, APEGA Board of Examiners, etc.),
- serving in a leadership role for an academic conference (e.g., conference chair, technical chair, etc.).

#### SSE B.2.4.1

Additional examples include:

ix. registered as a Professional Engineer (PEng) in the Province of Alberta,

# SSE B.2.4.3

Additional *examples* of research and scholarship indicators include:

- evidence of an internationally recognized research program (e.g., awards from national societies, invited lectures/presentations at national meeting, invitation to labs, etc.),
- a succession of successful competitive grant awards,
- research awards such as "best conference paper",
- invited to serve as external examiner on national/international graduate thesis exam(s),
- contributions to public policy,
- leading collaborative research projects/grants.

#### SSE B.2.4.4

Additional examples of teaching indicators include:

- successful supervision of HQP (highly qualified personnel): i.e., primary supervision of postdoctoral fellows, primary supervision and completion of PhD students, primary supervision and completions of MSc students, successful supervision and completion of undergraduate summer research students, a record of publications with HQP,
- contributions to curriculum development or teaching practice: e.g., new course development; contributions to curriculum development or reform,
- educational leadership: e.g., leadership in curriculum development or reform; leadership of
  educational workshops, seminars, conferences; national or international consultant on
  education; administrative appointments such as Committee Chair for Educational initiatives
  or Associate Head, Undergraduate Studies,
- publication of textbooks.

#### SSE B.2.4.5

Additional *examples* of service indicators include:

- leadership of internal (department, school, university) committees and/or task forces,
- serving in a leadership role for academic journal (e.g., editor, associate editor, etc.),
- serving in a leadership role on a professional society (e.g., president, vice-president, etc.),
- serving in a leadership role for a professional engineering association (e.g., APEGA Board Member, chair of CEAB visit team, etc.),
- review of competitive grant applications,
- mentoring of junior faculty members (e.g., as evidenced by letters, reviewing internal research grant applications).

#### SSE B.2.5.1

To be considered for appointment in the Teaching-Focused stream in the Schulich School of Engineering a candidate shall normally hold at least one of a MSc or other equivalent degree and be eligible for registration as a Professional Engineer (PEng) in the Province of Alberta. Under exceptional circumstances, individuals holding other graduate degrees and/or critical experience and expertise will be considered for appointment. Professional registration is an expectation that is linked to professional program accreditation. The expectation changes with stage of career: i.e., Assistant Professor (Teaching) (eligible), Associate Professor (Teaching)/tenure (registered or in process), Professor (Teaching) (registered).

Promotion and tenure in the Teaching-Focused stream does not require holding a PhD or other doctoral degree.

#### SSE B.2.5.2

*Examples* of research and scholarship indicators include:

- participation in national or international academic conferences (e.g., in one's discipline such as IEEE, ASME, etc., or in engineering education such as CEEA-ACEG, CDIO, ASEE, etc.),
- publications and presentations at national or international academic conferences (e.g., in one's discipline such as IEEE, ASME, etc., or in engineering education such as CEEA-ACEG, CDIO, ASEE, etc.)

#### SSE B.2.6.1

Additional examples of indicators include:

- use of a range of appropriate teaching and learning technologies,
- supporting students outside the classroom (e.g., mentoring, student clubs and teams),
- advising capstone design teams,
- field and practicum supervision,
- evidence of supporting student success (e.g., student feedback on instruction, student achievement of course learning outcomes),
- teaching awards,
- holding teaching and learning grants (e.g., Taylor Institute Teaching and Learning, etc.),
- publication of peer-reviewed higher-education/engineering education journal papers,
- publication of peer-reviewed higher-education/engineering education conference papers,
- publication of peer-reviewed higher-education/engineering education book chapters,
- publication of textbooks,
- presentation of research at national and international higher-education/engineering education conferences,
- media engagement (such as interviews with news agencies),

- active participation in curriculum development or reform,
- active participation at educational workshops, seminars, conferences; national or international consultant on education,
- administrative appointments such as Committee Chair for Educational initiatives.

#### SSE B.2.6.2

Additional examples of indicators include:

- engagement in evidence-based reflective teaching practices,
- participation in teaching triads,
- participation in national or international engineering education societies/associations,
- participation in teaching and learning workshops/courses.

#### SSE B.2.6.3

Additional examples of indicators include:

- active participation in internal (Department, School, and/or University) committees,
- active participation in ad hoc Departmental, School, and University task forces,
- participation in peer review of articles (conference and/or journal),
- active participation on national and international higher-education journal editorial boards,
- active participation on professional societies (e.g., IEEE, CSME, CEEA-ASEG, etc.),
- active participation on professional engineering committees (e.g., CEAB, APEGA Board of Examiners, etc.),
- serving in a leadership role for a higher education/engineering education academic conference (e.g., conference chair, technical chair, etc.).

# **SSE B.2.7.2**

Additional examples of indicators include:

- publications and presentations at higher education/engineering education conferences,
- publications in higher education journals,
- provision of open-source teaching modules/materials,
- mentoring of junior faculty members (e.g., as evidenced by letters, reviewing internal research grant applications),
- leadership in curriculum development or reform,

# **SSE B.2.7.3**

Additional examples of service indicators include:

- leadership of internal (department, school, university) committees and/or task forces,
- serving in a leadership role for higher education/engineering education academic journal (e.g., editor, associate editor, etc.),
- serving in a leadership role on a national or international engineering education society/association (e.g., president, etc.),
- serving in a leadership role for a professional engineering association (e.g., APEGA Board Member, chair of CEAB visit team, etc.),
- administrative appointments such as Associate Head, Undergraduate Studies.

#### SSE B.4.2.3

Academic Staff should take care to identify the ongoing status of any works in progress to enable any persons or groups reviewing their work to properly situate such works in progress within each academic staff member's scholarly context. Works in progress serve as evidence of ongoing academic contributions. In some fields, scholarly works require prolonged time periods of continued activity to reach full development and impact; in such cases, the achievement of key milestones within a work in progress will generally receive credit or recognition. Papers will be considered as a contribution to the Merit Assessment process upon formal notice of acceptance.

# Part C - Academic Appointments Selection Procedures, Position Posting, Expedited Procedures for Spousal and Strategic Hiring, Equitable and Inclusive Hiring Initiatives

#### **SSE C.2.1**

The Academic Appointment Selection Committee is responsible for drafting a position posting.

#### SSE C.3.1.1

The individuals responsible for the selection and appointment of the Academic Appointment Selection Committee are identified in Part C.3.1.2.

## SSE C.3.1.2(ii)

Three to five voting members from the Continuing, Limited Term and Contingent Term academic staff members of the Home Unit, with a majority of these members holding a Continuing appointment, are elected at a meeting of the Department Council.

# SSE C.3.1.2(iii)

At least one voting member who holds an appointment as an academic staff member within the Faculty but is outside the affected discipline or Department, as applicable, is appointed by the Dean.

#### SSE C.3.1.2(iv)

At least one voting member from outside the Faculty and any applicable Conjoint Unit is appointed by the Dean on the advice of Chair.

# SSE C.3.1.2(v)

Student representation is not required on the Academic Appointments Selection Committee. Students will be invited by the Chair of the Academic Appointments Selection Committee to seminars by the candidate (e.g., teaching, research seminars) and will be provided with opportunities to provide written feedback to the Chair.

# SSE C.3.1.2(vi)

In special cases, a non-voting member external to the University may be appointed by the Chair with the approval of Department Council.