

DEPARTMENT OF CHEMICAL ENGINEERING PROMOTION AND TENURE GUIDELINES

A. Overview

The Department of Chemical Engineering adheres to the [Guidelines for Promotion and Tenure](#) issued by the College of Engineering. Candidates for promotion should become familiar with those guidelines and the [Faculty Code and Governance, Chapter 24](#), Sections [24-32](#) and [24-34](#). Those documents outline the procedures and standards related to promotion and tenure. This departmental document addresses issues related specifically to the standards of excellence expected by the Faculty of Chemical Engineering.

Individuals considered for faculty appointment or promotion within the Department of Chemical Engineering are evaluated on their record of, and potential for, contributions and scholarship in teaching, research, and service. Teaching includes classroom instruction, research mentoring, continuing education, and similar efforts that advance the understanding of chemical engineering principles by others. Research includes the discovery and development of new knowledge and technologies. Service involves departmental and professional activities to benefit Chemical Engineering, the University, government agencies, professional societies, or the public through such efforts as administration, scientific review, academic governance, and professional leadership.

All faculty, regardless of rank or track, are expected to engage in department governance and maintain high standards of professional integrity and conduct as defined in the [AIChE Code of Ethics](#) and encouraged to consider the goals listed in the [AIChE Equity, Inclusion, and Diversity Statement](#). Given the potential major implications for career progression, any instances of behavior that fall short of these standards must be fully documented by departmental leadership to be presented as relevant information in the context of promotion and/or tenure.

Each faculty member is expected to exhibit a record that includes teaching, research, and service activities and accomplishments. The relative emphasis on these areas will vary for each individual depending on type of appointment, stage of career, and professional circumstances. An appropriate overall balance is expected together with a demonstrated ability to contribute in a collegial fashion to the academic mission of the Department of Chemical Engineering.

In accordance with the University's expressed commitment to excellence and equity, contributions and scholarship in research, teaching, and service that address diversity and equal opportunity shall be included and considered among the professional and scholarly qualifications for appointment and promotions as outlined below.

The Department of Chemical Engineering recognizes that the funding landscape for scholarship varies over time, across research areas, and among faculty with diverse scientific interests. Quality and impact may be demonstrated by tenure-track, tenured, and research faculty regardless of specific levels of extramural funding, though success in securing competitive support is recognized where applicable.

The guidelines in this document should serve as a starting point for discussions between individual faculty members and the Department Chair during the annual conference for assistant professors or biannual and triannual conferences for associate and full professors, respectively. A copy of this document should be sent to each faculty member when these meetings are scheduled so that they can plan and prioritize their efforts in ways that directly support both their professional growth and the missions of the Department and College.

B. GENERAL CRITERIA FOR PROMOTION

The essential requirement for promotion is excellence in scholarship arising from a body of work related to research, teaching, and other scholarly activities as defined below. The degree to which a faculty member has advanced their field can best be judged by impartial observers in a position to assess the impact of a faculty member's work such as academic leaders in the candidate's field, distinguished leaders in industry, and other recognized leaders as appropriate to the scholarship. Excellence implies a sustained commitment to high quality scholarship. Therefore, one criterion to be applied when evaluating a candidate for promotion is the assessment that they will continue to be a productive scholar even without the inducement of a promotion. This is especially important in the case of tenure, but it is to be applied to all promotion cases.

Evidence supporting a sustained record of teaching, research, and service can also include activities or products that could be assigned to multiple categories or elude simple classification, including: (1) research and creative works disseminated in channels other than peer-reviewed journals, (2) open science and open scholarship, (3) teaching-related scholarship in or beyond the classroom, (4) interdisciplinary collaboration, (5) entrepreneurship and innovation, (6) community engagement, (7) mentoring of students and colleagues, and (8) global engagement. A non-exhaustive list of examples of potential means of demonstrating contributions and scholarship in these categories is provided in [Appendix 1](#).

C. TENURE TRACK FACULTY

1. Promotion to Associate Professor

For Assistant Professors, the weighting of teaching, research, and service is 40-40-20 for a 9-month appointment, unless articulated differently in the employment offer letter. Individuals are expected to concentrate on advancing their teaching skills and developing their research programs. Administrative and committee work should focus on activities that advance their teaching and research goals. Otherwise, the Department will attempt to free them from administrative work, committee work, and other services to permit them to concentrate on career development. To assist with that development, the Department has a mentoring system in which a senior faculty member is assigned to work with a junior faculty member to advise, suggest improvements, and otherwise help the junior faculty member get established.

Promotion to the rank of **Associate Professor** requires a high level of scholarship based on the candidate's existing body of work, in accordance with Section [24-34](#) of the Faculty Code, which states: "Appointment to the rank of associate professor requires a record of substantial success

in teaching and/or research. For tenured, tenure-eligible, or WOT appointments, both of these shall be required, except that in unusual cases an outstanding record in one of these activities may be considered sufficient." The candidate will have established:

- 1) An independent research program in their area of scholarly activity capable of sustaining high levels of performance beyond promotion,
- 2) An ability to contribute effectively to classroom, laboratory, and/or project-based training of students in the department.
- 3) National recognition of their contributions to their area of scholarly activity.

2. Promotion to Professor

For Associate Professors and Professors, the nominal weighting for teaching, research, and service/administration is 40-40-20. Individuals may negotiate with the Chair if they would prefer different weighting. The needs of the Department must be considered in this decision, which may constrain deviations from the nominal weighting.

Promotion to the rank of Professor shall be based on the criteria outlined for promotion to Associate Professor, but to a higher level of scholarship and accomplishments:

- 1) National and international recognition of outstanding and currently active scholarly and/or translational research, and
- 2) A sustained record of contributions to the teaching mission of the UW.

D. RESEARCH TRACK FACULTY

1. Promotion to Research Associate Professor

For Research Assistant Professors, the nominal weighting of teaching, research, and service is 0-80-20. Individuals desiring a teaching component may negotiate with the Chair. The needs of the Department must be considered in this decision, which may constrain deviations from the nominal weighting.

Individuals are expected to concentrate on developing their research programs. Administrative and committee work should focus on activities that advance their research goals. Otherwise, the Department will attempt to free them from administrative work, committee work, and other services to permit them to concentrate on career development. To assist with that development, the Department has a mentoring system in which a senior faculty member is assigned to work with a junior faculty member to advise, suggest improvements, and otherwise help the junior faculty member get established.

Promotion to the rank of Research Associate Professor requires a high level of scholarship based on the candidate's body of work. Consistent with a Research track appointment, scholarship will be evaluated in research related areas of scholarly activity, as outlined in Appendix I. In cases where the candidate has served in a teaching role, research-related scholarship in those teaching activities will be considered. The candidate will have established:

- 1) Evidence of independent research achievement and national reputation, and
- 2) Development of independent research funding where appropriate.

Whether working under one's own direction or in large groups, center programs, and/or under the direction of senior faculty, Research Assistant Professors may establish their research independence through:

- 1) Publications on which the candidate is the senior, shared-senior, or sole faculty author (denoted as corresponding or co-corresponding author),
- 2) Service as principal investigator (PI) or co-principal investigator (co-PI) on grants from federal agencies such as NSF, NIH, DoD, DOE or similar grants from other extramural sources; PI on a section of a large-scale Program Project grant; or PI on a faculty development grant such as an Early Career Development Award or similar grants from other agencies,
- 3) Direct contribution to the writing of grants that lead to at least partial support of their position, and/or
- 4) Other scholarly contributions such as textbooks, chapters, reviews, research-related teaching and administration, or other relevant work.

2. Promotion to Research Professor

Promotion to the rank of Research Professor shall be based on the criteria outlined for promotion to Research Associate professor, but to a higher level of scholarship and accomplishments:

- 1) Independent research achievement and scholarly reputation, as evidenced by outstanding and currently active mature scholarly and/or translational research, sufficient to command an international reputation for scholarly contributions; service activities on international editorial boards or study sections; invitations to speak at international meetings, symposia or other institutions; and/or special honors, awards or other recognitions, and
- 2) A sustained record of independent research funding.

E. TEACHING TRACK FACULTY

For teaching faculty, the nominal weighting for teaching, research, and service is 80-0-20. The teaching component includes traditional classroom and laboratory teaching and other teaching-related scholarly activities, which can vary for each individual based on type of appointment, stage of career, and professional circumstances. Individuals may negotiate with the Department Chair if they would prefer a different weighting, including addition of a research component, where appropriate such as, for example, pedagogically related research. The needs of the Department must be considered, which may constrain deviations from the nominal weighting.

Individuals are expected to concentrate on developing their teaching programs. Administrative and committee work should focus on activities that advance their teaching goals. Otherwise, the Department will attempt to free them from administrative work, committee work, and other services to permit them to concentrate on career development. To assist with that development, the Department has a mentoring system in which a senior faculty member is assigned to work with a junior faculty member to advise, suggest improvements, and otherwise help the junior faculty member get established.

1. Promotion to Teaching Associate Professor

Promotion to the rank of Teaching Associate Professor requires a high level of scholarship based on the candidate's body of work. Consistent with a Teaching track appointment, scholarship will be evaluated in teaching related areas of scholarly activity, as described in Appendix I. In cases where the candidate has served in a research role, teaching related scholarship in those research activities will be considered. The candidate will have established:

- 1) A record of substantial success in Chemical Engineering education as evidenced by student course evaluations, assessment by colleagues and faculty peers, and student success in subsequent educational and professional endeavors,
- 2) A sustained record of mentoring and/or advising of undergraduate or graduate students, and/or
- 3) Independent scholarship in teaching-related and/or other scholarly activities (outlined in Appendix I), as evidenced by student achievement, assessments by colleagues and faculty peers, receipt of grants or awards, testimonials and letters of recognition from engaged groups and organizations, or other relevant forms.

Note that national scholarship is not required for promotion to Teaching Associate Professor.

2. Promotion to Teaching Professor

Promotion to the rank of Teaching Professor shall be based on the criteria outlined for promotion to Teaching Associate Professor, but to a higher level of scholarship and accomplishments:

- 1) Exemplary success in instruction, curricular design and implementation, student mentoring, and service and leadership to the department, school/college, University, and field,
- 2) A sustained record of contributions to the teaching mission of the UW beyond excellence in individual courses,
- 3) Significant contributions and scholarship in educational innovation as assessed by students, colleagues, and/or peers external to the candidate's home department, and/or
- 4) A sustained record of scholarly activities in the candidate's field of expertise that demonstrate significant impacts to chemical engineering teaching and learning, as evidenced by stakeholders external to the UW (i.e., national and/or international) such as:
 - a. Invitations to disseminate curriculum or pedagogical resources via peer-reviewed papers, contributions (authorship or editorship) to published textbooks, or presentations at conferences on engineering education;
 - b. Invitations to give scholarly presentations, appear on professional panels, or contribute to professional media on engineering education;
 - c. Testimonials documenting teaching excellence from program alumni who have gone on to lead distinguished careers;
 - d. Appointment to leadership positions outside the Chemical Engineering department in recognition of scholarly excellence (i.e. at the college or university levels, or via relationships with professional societies); or
 - e. Receipt of awards, nominations, or other distinctions or accolades outside the department.

Note that international scholarship is not required for promotion to Teaching Professor.

Appendix 1: Definitions & Examples of Faculty Activities

This appendix lists potential faculty activities that may serve as evidence for promotion and tenure across all ranks and tracks, organized under Teaching, Research, and Service. They are illustrative rather than exhaustive and should not be treated as a checklist of required items. The relative weight of specific activities will vary by rank, track, and individual career path. Candidates are encouraged to discuss the components of any promotion and/or tenure request with their mentorship team, including faculty mentors and Department leadership.

A. Teaching & Other Instructional Activities

Effectiveness of teaching is a fundamental criterion for promotion and tenure within the Department. Examples include regularly scheduled courses in our programs, special topic courses, directed research groups, independent studies, and supervising graduate and undergraduate students in research or other educational activities. Directed research groups, independent studies, and supervising research may in some cases be better described as research contributions.

Examples of quality and effective teaching activities may include:

- Development and/or implementation of innovative or evidence-based teaching methods
- Successful curriculum or course design and refinement that incorporates formative assessment
- Demonstrated effectiveness in the classroom, as shown through peer reviews, student evaluations, or teaching awards
- Mentorship and advising of undergraduate and graduate students, including supervision of research, capstone, or creative projects
- Incorporation of best teaching practices that support diverse learners
- Leadership in educational initiatives, such as leading teaching workshops, chairing curriculum committees, or contributing to educational policy
- Development and dissemination of educational resources, such as textbooks, open educational materials, or digital learning tools
- Engagement in the scholarship of teaching and learning, including presentations or publications on pedagogical innovations
- Positive impact on student success, retention, and achievement, with supporting documentation or outcomes
- Incorporation of the UW's elements of effective teaching and learning
- Creating and delivering entrepreneurship education programs, workshops, or courses for students or the broader community
- Designing and teaching courses with robust community-engaged elements

- Developing or teaching innovative courses with robust global learning elements, including study abroad courses, courses with international field work, or global classroom experiences, including Collaborative Online International Learning (COIL)

B. Scholarship & Research Activities

Scholarship in research is the measure of intellectual achievement in academic fields. It includes research activities of all kinds, such as creative synthesis of previous research, the creation of innovative systems and technologies, speculative and theoretical work, and empirical research with human subjects. Scholarship may also be demonstrated by publishing articles, papers, and books; giving conference talks and other presentations; developing new courses; and other contributions as outlined in the specific promotion criteria below.

Examples of quality and effective scholarship broadly categorized as research and creative work may include:

- Authoring or co-authoring peer-reviewed journal articles, books, book chapters, monographs, or textbooks
- Publishing or presenting research, including non-peer-reviewed work, that advances the field
- Development of new theories, methodologies, frameworks, standards, tools, processes, data sets, software, or codes that advance knowledge or practice
- Contributions to digital scholarship such as digital archives, databases, interactive media, or open-source software
- Creation of artistic works, performances, exhibitions, compositions, or design projects that are publicly presented, performed, or displayed
- Presentations at regional, national, or international conferences, symposia, or scholarly meetings
- Invited presentations, keynote lectures, plenary talks, panels, named lectureships, or consultations related to research or professional practice
- Serving as principal investigator, co-investigator, or project leader on research grants, contracts, or fellowships
- Securing competitive research funding from government agencies, foundations, industry, or other sponsors
- Editing journals, volumes, books, or major reference works, or serving on editorial boards
- Receiving awards, honors, or recognition for research or creative work
- Evidence of the impact or uptake of research or creative work, including citations, software and dataset adoption, licensing of intellectual property, media coverage, policy adoption, or public engagement

Scholarship in education and pedagogy relates to the development and dissemination of new courses, educational paradigms, curricula, and translation of current academic research to the classroom. Examples may include:

- Authoring or co-authoring textbooks

- Authoring or co-authoring open-source or other educational resources for students and/or faculty to support teaching and learning
- Publishing or presenting research on pedagogy or the scholarship of teaching and learning at the department, college, university, or field level
- Presentation at national or international meetings of teaching in a specialty area
- Invited presentations or panels on pedagogy
- Writing professional journal articles or columns on pedagogical scholarship
- Serving as principal investigator or co-investigator on grants focused on education in a specialty or area of expertise
- Development, substantial revision, or re-envisioning of courses integrating new pedagogical methods or evidence into objectives, content, or evaluation
- Development or re-envisioning of curriculum within the faculty member's unit or in collaboration with other academic units
- Creation of curricular materials adopted by instructional units outside the University of Washington
- Participation in education-related task forces, accreditation teams, or conference planning committees

Examples of quality and effective scholarship in entrepreneurship, innovation, and translation may include:

- Participation in entrepreneurship, innovation, or commercialization programming and competitions, including CoMotion Gap Fund activities, Buerk Center Innovation Challenges, Engineering Innovation in Health, and hackathons
- Obtaining translational funding or investment, including SBIR/STTR grants, translational awards, angel or venture capital, or philanthropic support
- Founding or co-founding startups, spin-off companies, or social enterprises based on research discoveries
- Leading or contributing to commercialization efforts, including technology transfer, product development, or market traction
- Securing collaborative agreements with industry or demonstrating market traction for university-developed technologies or creative works
- Enhancing shared facilities/equipment and training UW and industry users.
- Developing new methods, tools, or processes adopted by industry, government, or academic partners
- Consulting for industry, government, or nonprofit organizations on the translation and application of scholarly or creative expertise
- Receiving innovation-related awards, honors, or recognition

Examples of quality and effective community-engaged and public-facing scholarship broadly may include:

- Documentation of mutually beneficial, reciprocal partnerships with community organizations or stakeholders
- Co-authored publications or presentations with community partners

- Grants, contracts, or funding awarded for community-engaged or community-based scholarly projects
- Demonstrated scholarly impact on community-identified needs or priorities
- Outcomes showing positive social, economic, environmental, or health impacts arising from the research
- Public dissemination of scholarly work to community or non-academic audiences, including reports, workshops, or media coverage
- Letters of support or testimonials from community collaborators with no conflict of interest
- Recognition or awards from community organizations or professional bodies
- Engagement in tribal or community-based scholarship activities

Examples of quality and effective scholarship in global and international engagement may include:

- Leading or participating in international research collaborations, consortia, or multi-country projects
- Publishing scholarly work with international collaborators or in journals or outlets with global reach
- Presenting research or creative work at international conferences, workshops, or exhibitions
- Securing grants, fellowships, or funding for projects with significant international components or global impact
- Developing and leading study abroad or other internationally focused scholarly programs for UW students
- International engagement activities related to scholarship

C. Service Activities

Professional service is valued as a significant contribution to the department, the college, the university, and the field at large. It includes mentoring students and faculty; serving on committees (within and outside of the university); service to local, national, and international professional organizations (e.g., guiding conferences, meetings, forums); teaching professional development seminars and workshops; consulting activities, etc.

Specific examples of impactful service activities may include:

- Leadership roles within the department, college, or university, including serving as chair, program director, center or institute director, or in leadership roles on strategic planning or major institutional committees
- Active participation or leadership in faculty governance, admissions, accreditation processes, or major institutional initiatives
- Service in professional societies, including holding elected office, organizing conferences, or chairing committees
- Service for academic journals, including serving as an editor, editorial board member, peer reviewer, or grant reviewer

- Organizing academic symposia, workshops, public lectures, or events that enhance the institution's reputation or scholarly community
- Outreach activities connecting the university to external communities, including K–12 partnerships, public lectures, or service on community advisory boards
- Advancing diversity, access, equity, and inclusion through committee service, program development, advocacy, or community or climate-building activities
- Mentoring and supporting faculty colleagues through professional development, onboarding, or peer support activities
- Organizing innovation challenges, hackathons, or business plan competitions
- Building or leading interdisciplinary teams to address real-world problems with creative or scalable solutions
- Providing mentorship or support for student or faculty entrepreneurship ventures
- Mentoring undergraduate or graduate students, or postdoctoral fellows in public, community-engaged, globally engaged or applied scholarship and research
- Serving as faculty advisor for student organizations
- Mentoring undergraduate or graduate students or postdoctoral fellows in professional development through workshops, seminars, career preparation, thesis committee membership, or other similar opportunities
- Documented mentoring outcomes, including mentee achievements, post-graduation placement, letters from mentees, or other evidence of impact
- Evidence of effective mentoring, including undergraduate or graduate student feedback on mentorship experiences
- Contributions to a positive, inclusive academic environment that fosters growth and success for students, staff, or faculty
- Service on national or international boards, panels, advisory groups, or review committees relevant to one's field
- University representation in attracting philanthropic interest, partnerships, or external funding
- Documented impact or outcomes resulting from service activities, including policy changes, new programs, or improved organizational processes
- Establishing or sustaining partnerships with universities, research institutes, or organizations outside the United States, including serving as a faculty champion for such partnerships
- Hosting visiting scholars from international institutions and engaging in reciprocal academic exchanges
- Engaging in policy development, advisory roles, or consultancy for international agencies, non-governmental organizations, or governments
- Contributing to capacity-building initiatives or training programs in other countries
- Demonstrating service-related impact on global issues, such as health, sustainability, climate, environment, human rights, or education
- Receiving awards, honors, or recognition for service, mentoring, or global engagement from institutional, national, or international organizations