

## Principles for Promotion/Tenure Evaluation

By articulating criteria for tenure and promotion of tenure-track faculty, the College of Engineering aims to promote transparency, and provide guidance to candidates, mentors, and evaluators of promotion cases. Tenure-track faculty are evaluated based on excellence of contributions to teaching, research, and service, as elaborated below. It is also important to emphasize some general principles for promotion/tenure evaluation.

1. Faculty are expected to uphold the [values of the College of Engineering](#), and consideration of these values pervades the evaluation process.
2. The overriding criterion for excellence is *impact*, broadly interpreted. We encourage faculty to pursue highly innovative and creative solutions to the most challenging problems, recognizing that not every daring idea can be expected to fully succeed.
3. Specific factors and measures reported in the casebook and discussed below are generally not objectives in themselves; rather, they are proxies for or evidence of contribution and impact. Evaluators are cautioned against over-reliance on readily quantified metrics as opposed to qualitative or holistic assessments of impact based on all available evidence.
4. Engineering at Michigan encompasses a diverse set of disciplines, covering many different methodologies and norms of scholarly communication, and admitting a variety of ways of expressing contributions to teaching, research, and service. Candidates should be evaluated with respect to the standards of their own fields, including interdisciplinary work.
5. Cases are assessed based on the candidate's full path of achievement, including but not limited to cumulative contribution and rate at the time of assessment. There is no strict minimum time in rank for tenure or promotion consideration. Experience suggests that it typically takes the full tenure clock or, respectively, at least six active years as associate to demonstrate the requisite criteria for promotion.
6. Not all contributions fit neatly into one of the major categories of teaching, research, and service. In particular, mentoring plays an important role in all three, as does activity in support of diversity, equity, and inclusion (DEI).
7. The criteria below are described qualitatively in text, with bulleted lists summarizing key expectations in each major area. These are not to be read as checklists, however. The standard for tenure and promotion is that the criteria be substantially met across the board, which may not necessitate that every single item be satisfied to the letter.

## Teaching

Excellence in teaching is measured by the quality of classroom instruction, impact on the curriculum, and the advising of students. In assessing teaching, evaluators need to be sensitive to limitations of information in the standard record, and problems of according too much weight to single measures (e.g., evaluation scores) or sources (e.g., an individual student letter).

**Classroom instruction.** Excellence in classroom instruction is evident in all learning delivery modalities and may be demonstrated from examination of syllabi and class materials, teaching evaluations, faculty peer evaluations, student feedback, and promotion of DEI in teaching. Demonstration of breadth in level and topic across courses taught is valued, recognizing that departmental needs may constrain which classes candidates can teach.

**Impact on curriculum.** Significant impact on the undergraduate, graduate, or professional education curriculum can be made through the development of a new course or program, course revision, or innovations in teaching methods. Evidence might include syllabi and class material, documentation of innovations in teaching, course revision or development, and publications or presentations about teaching innovations.

**Mentoring, advising, and supervision.** Faculty are expected to engage individually to guide students at the undergraduate and graduate levels. This might include mentoring/advising of undergraduate students, mentoring/advising of graduate students and postdoctoral researchers (including service on PhD committees), directing undergraduate major projects, advising student teams or clubs, supervising UROP students, and supervision of field work, clinical, or practicum experiences.

**Additional evidence of excellence in teaching.** There are other opportunities to demonstrate excellence in teaching, including short courses and workshops taught, development of distance learning programs, outreach related to teaching, participating in or development of activities to support DEI as related to teaching, and development of co-curricular opportunities.

Associate	<ul style="list-style-type: none"><li>● Developing record of excellence in course instruction at both undergraduate and graduate levels</li><li>● Course development, course revision, or innovation in classroom technique</li><li>● Building a record of effectively advising students at multiple levels</li></ul>
Full	<ul style="list-style-type: none"><li>● Sustained record of excellence in teaching contributing to program educational mission</li><li>● Course development, course revision, or innovation in classroom technique</li><li>● Sustained record of effectively advising students at multiple levels</li></ul>

## Research

Excellence in research is measured by the novelty and significance of the ideas and discoveries produced by the candidate’s research. Significance in turn is manifest as impact—on the academy and scientific communities, and on engineering practice and society. A successful researcher has built a clear and independent scientific identity, defined by field(s) of inquiry, problems addressed, techniques employed, and contributions credited to the researcher.

**Publication.** Scholarship is documented by a record of publication. Publishing norms vary by engineering discipline, so a record must be judged relative to the forms of publication and venues (e.g., journal, conference, both/other) considered most salient within the candidate's field. Prestige and selectivity of a venue may be indicative of a publication’s significance. Impact of a publication can be evidenced by its influence on subsequent literature and practice, and assessments of experts in the field. For collaborative works, degree and independence of contribution needs to be assessed.

Associate	<ul style="list-style-type: none"> <li>● building record of scholarly publication in salient forums for candidate’s field</li> <li>● evidence of publication impact</li> </ul>
Full	<ul style="list-style-type: none"> <li>● sustained record of contribution to scholarly literature</li> <li>● substantial cumulative evidence of publication impact</li> </ul>

**Mentoring of PhD Students and Postdocs.** A key means by which researchers exert influence and achieve impact is by training future generations of researchers. Working with teams of student researchers and (sometimes) postdoctoral fellows and junior research faculty is the primary mode of research at Michigan Engineering.

Associate	<ul style="list-style-type: none"> <li>● established a research group</li> <li>● mentee co-authorship of publications</li> <li>● one or more PhD students at or near completion</li> </ul>
Full	<ul style="list-style-type: none"> <li>● sustained record of success in mentoring</li> <li>● maintaining a pipeline of students</li> <li>● effective placement of graduated students and post-docs</li> </ul>

**Funding.** Securing externally sponsored funds is essential to maintaining a robust research program over time. Available sources and magnitude of funding required may vary by area, and thus it is necessary to assess funding success relative to the candidate’s research enterprise. Success in obtaining competitive grants also demonstrates the ability to identify targets of value and in need of research effort, and persuading sponsors of the quality and worth of one’s research production.

Associate	<ul style="list-style-type: none"> <li>● successful acquisition of sponsored research funds as a principal investigator</li> <li>● evidence of ability to secure resources necessary to support the candidate's research program</li> </ul>
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Full	<ul style="list-style-type: none"> <li>● sustained record of funding, ideally from diverse sources, commensurate with maintaining a robust and leading research program in the candidate’s area</li> </ul>
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**Additional evidence of excellence in research.** There are other valid indicators of excellence in research that do not directly fall into the above categories, for example: patents and translational activity; influence in policy or public discourse on technical matters; demonstrated impact on society or human health; demonstrated impact on engineering or manufacturing practices.

**Overall Research Impact and Visibility.** Research impact is best evaluated with reference to specific contributions and accomplishments, for example as attested in letters from internal and external experts. A reputation of primary association with a particular achievement or subject is strong evidence of research leadership. In addition to production in specific categories above, visibility can be reflected by awards, invitations to present at prestigious institutions and forums, external service (criteria defined below), public engagement, and media reports.

Associate	<ul style="list-style-type: none"> <li>● emerging leader</li> <li>● developing reputation in field based on identified research contributions</li> </ul>
Full	<ul style="list-style-type: none"> <li>● recognized leader</li> <li>● established reputation in field based on sustained record of contributions</li> </ul>

## Service

Excellence in service is measured by contribution to governance, both internally at the University of Michigan and externally to the academic community and broader society. Documented quality and impact of service performed is more important than quantity of service activity per se. Outreach and other activities in support of diversity, equity, and inclusion are valued forms of service, both internal (e.g., for recruiting to Michigan or on behalf of a University activity) and external (e.g., for broadening participation in a field or serving societal need). Service leadership is demonstrated by responsibility taken in appointed roles, and innovation in identifying and addressing service needs.

**Internal.** Faculty are expected to be conscientious citizens and contribute to the governance of their academic units. Internal service comprises effective work in support of the mission of the candidate’s department, college, and university. Scope and responsibility of internal service contributions are relative to unit needs, and expected to increase with seniority.

Associate	<ul style="list-style-type: none"> <li>● demonstration of good citizenship in service to department</li> <li>● collaborative work on committees or other internal service tasks</li> </ul>
Full	<ul style="list-style-type: none"> <li>● effective leadership service to department, college, and/or university</li> <li>● sustained record of productive interactions and collaborative service</li> </ul>

**External.** Faculty are expected to engage with external institutions maintaining the research enterprise, including professional societies, government agencies (or other research sponsors), publishers, and others. Such engagement produces goodwill and visibility for the candidate (and, by representation, the University of Michigan), and provides opportunity for impact on the wider academic and research community.

Associate	<ul style="list-style-type: none"><li>● demonstration of good citizenship in service to professional community</li><li>● fulfillment of trust roles such as reviewing and meeting organization</li></ul>
Full	<ul style="list-style-type: none"><li>● effective leadership service to professional community</li><li>● sustained record of service in a variety of capacities, impact on community</li></ul>