Department of Mechanical Engineering
Criteria for Tenure, Promotion and Post-Tenure Review
("Department 7.12 Statement")
Adopted by the Department Faculty: December 20, 2007
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I. Introduction

This document specifies the indices and standards that are used to evaluate faculty in the Department of Mechanical Engineering for tenure, promotion, and post-tenure review. The Department indices and standards are consistent with the University indices and standards for tenure, promotion and post-tenure review described in Sections 7.11, 9.2 and 7a of the Board of Regents Faculty Tenure policy (version June 8, 2007; hereafter cited as Faculty Tenure), that also apply to faculty in the Department of Mechanical Engineering. Sections 7.11 and 9.2 of Faculty Tenure appear in Appendix A and B of this document. In addition, this document is consistent with the Procedures for Reviewing Candidates for Tenure and/or Promotion: Tenure-Track and Tenured Faculty (2007), hereafter referred to as the Procedures. The Department requires that faculty be familiar with the entire Faculty Tenure policy as well as the University Procedures for Reviewing Candidates for Tenure and/or Promotion: Tenure-Track and Tenured Faculty (hereafter called the Procedures)\(^2\) and the Department of Mechanical Engineering Policies and Procedures document.

The indices and standards in this document are used for the following personnel evaluations:

A. Annual performance appraisal of progress toward achieving tenure.

B. Recommendation for awarding indefinite tenure.

C. Recommendation for promotion to the rank of Associate Professor.

D. Recommendation for promotion to the rank of Professor.

E. Goals and expectations for tenured faculty

F. Annual post-tenure review of tenured faculty.

\(^1\) The Board of Regents Faculty Tenure policy is available on-line at
http://www1.umn.edu/regents/policies/humanresources/FacultyTenure.pdf

\(^2\) The Procedures for Reviewing the Performance of Tenure-Track Probationary Faculty is available on-line at http://www.academic.umn.edu/provost/faculty/pdf/procedures101207.pdf
II. Department Mission Statement

The mission of the Department of Mechanical Engineering comprises three objectives: the education of students and professionals at all levels through a dedication to effective teaching; the pursuit and dissemination of new knowledge through original and creative research; and the advancement and application of scientific and technical knowledge and expertise through professional service.

III. Annual Appraisals of Probationary Faculty

Probationary faculty are reviewed annually and progress is evaluated according to the criteria in Section 7.11 of Faculty Tenure, the Procedures, and the criteria in Section IV of this document.

Mentoring is an important component in the promotion and tenure process. A Mentoring Committee is assigned to each untenured faculty member shortly after he or she joins the faculty. The responsibility of the Mentoring Committee is to provide guidance towards launching a distinguished academic career that includes high-quality teaching, productive research and a well-funded research program.

Probationary faculty members in the Department of Mechanical Engineering undergo a regular annual review cycle. This review includes input from their Mentoring Committee, discussions with and feedback from the Department Head, review by the Department Promotions and Tenure Committee, and review by tenured faculty in the Department during the annual promotion and tenure process.

Tenure decisions may be made in any year of the probationary period, as described in Section 5.2 of Faculty Tenure and Section 9 of the Procedures. A candidate must be considered in a formal tenure review in the last year of the probationary period. In accordance with Section 5.5 of the Tenure Policy, the probationary period may be extended by one year at a time at the request of the faculty member for either childbirth/adoption or caregiver responsibilities, or when the faculty member has an extended serious illness, injury, or debilitating condition. The Department of Mechanical Engineering may also recommend termination of a candidate's appointment at any time in accordance with Section 7.3 of the Tenure Policy and Section 10 of the Procedures.

Several types of joint appointments are possible. Faculty can be members of the graduate faculty of programs that reside outside the Department of Mechanical Engineering. Such appointments generally reflect positively on a faculty member’s work. A faculty member’s salary may be split among two or more departments. In this case, the department that pays more than half of the salary will be responsible for tenure and promotion decisions, although contributions to each unit will be considered in those decisions. See the Procedures for additional considerations for faculty with split or interdisciplinary appointments.
IV. Conferral of Indefinite Tenure

Section 7.11 of the Tenure Policy (Appendix A) specifies the general criteria for tenure.

To be awarded indefinite tenure in the Department of Mechanical Engineering a faculty member must demonstrate effectiveness in teaching and must establish a record of excellence and creativity in scholarly research and its dissemination. These are the primary criteria, and the fulfillment of both is a minimum requirement for the awarding of indefinite tenure. Extraordinary distinction in teaching alone or in research alone is not sufficient for the granting of indefinite tenure. In the Department of Mechanical Engineering, teaching and research are valued equally in the tenure decision.

A faculty member may choose to participate in service to the profession and in other governance and service activities. In the Department of Mechanical Engineering, service contributions are secondary to teaching and research in evaluations leading to decisions related to the granting of tenure. An outstanding record in the service component alone is not sufficient to form the basis for a recommendation to indefinite tenure.

When considering the record of probationary faculty who have stopped the tenure clock (Section 5.5 of the Tenure Policy), the criteria for promotion and tenure are no different than the criteria for faculty who do not have an extension of the probationary period. Extension of the probationary period in accordance with Section 5.5 should not be a factor in the tenure decision. That is, a record of six years post-hiring with a one-year stopping of the clock must be considered the same way that one considers five years post-hiring with no stopping of the tenure clock. Thus, those who review the promotion dossier or write letters regarding promotion must be informed if the clock has been stopped.

A. Teaching Component

Effectiveness in teaching is assessed from the candidate's contributions to the overall teaching mission of the university including, where appropriate, classroom, laboratory and individualized instruction at both undergraduate and graduate levels, the supervising of graduate students, and the advising of postdoctoral personnel.

Examples of factors which may be used in the evaluation of effectiveness in teaching at the undergraduate level include, but are not limited to, the following:

- written evaluations by students
- quantitative course evaluations by students; performance is expected to be in the satisfactory range as defined by the Department norms for those courses
- written evaluations by peers based on classroom visits and review of course materials including student output
- development of new courses and/or laboratories
• supervision of undergraduate research projects
• advising of undergraduate and professional student organizations
• development of instructional materials
• publication of textbooks
• local and national awards for teaching
• participation in teaching improvement programs and a resulting upward trajectory in student and peer evaluations.

At the graduate level, the primary consideration in establishing teaching effectiveness is expertise in the teaching of advanced courses, in the conducting of graduate seminars and in the supervising of graduate students at the masters and doctoral levels. Other factors that may be taken into consideration at the graduate level include, but are not limited to, the following:

• M.S. and Ph.D. advisees graduated
• written evaluations by students
• written evaluations by peers based upon classroom and/or seminar visits
• development of new courses and/or laboratories
• peer evaluation of the progress of the candidate's advisees
• supervision of postdoctoral personnel and of other post-baccalaureate programs and students.

B. Research Component

The quality of a candidate's original research and the impact of the work within the candidate's professional discipline are the primary criteria by which professional distinction in research is established. In evaluating the candidate's research contributions through the various avenues of publication and presentation, the objectives are to establish that the work is of high quality, that it is a scholarly and creative contribution to the candidate's professional discipline, and that it is a measure of the candidate's potential to make continuing contributions in pure and/or applied research.

Examples of factors upon which an analysis of the research accomplishments of the candidate may include, but are not limited to, the following:

• publications
  – articles published in high-quality, peer-reviewed archival journals are especially valued
  – monographs and scholarly review articles are also valued
  – papers that are co-authored by graduate or undergraduate advisees of the candidate are expected
  – publications that are co-authored with faculty or other senior researchers are viewed positively; it is important that the contributions of the candidate to such collaborative work be described clearly
publications of abstracts and conference proceedings and other professional publications are valued, but such publications do not form the primary basis for evaluating research contributions

- participation in professional conferences, symposia, meetings, and special lectures, especially those for which participation was by invitation
- ability to obtain external funding needed to support scholarly research
- patents, inventions, technology transfer, and other such developments of a significant scientific or engineering nature
- election to prestigious national organizations that recognize excellence in a discipline
- research awards and honors granted by professional societies, government agencies, or industry
- interdisciplinary research is valued and a positive view is taken of work that extends beyond the traditional bounds of the discipline.

Written evaluations of a candidate’s research are requested from persons who are generally recognized as leaders in the candidate's research area. An effort is made to obtain at least eight letters of evaluation. The reviewers may include persons within the University but must include at least six evaluations from outside the University, some of whom should be of international stature. About one half of these written evaluations will be solicited from individuals suggested by the candidate while the remainder will be solicited from individuals chosen by the Department Head in consultation with members of the Department Promotion and Tenure Committee. If the candidate has a strong interdisciplinary component in their research, letters of evaluation from faculty in the related unit(s) and from external reviewers whose research crosses similar interdisciplinary boundaries will be obtained.

C. Service Component

Outstanding service contributions will also be taken into account when considering a candidate for indefinite tenure. By itself, however, service to the profession is not a sufficient basis for the granting of tenure in the Department of Mechanical Engineering.

Examples of service contributions to the profession include, but are not limited to:

- editor or associate editor of a refereed scientific or technical journal
- officer in a national or international scientific or technical society
- member of a national or international scientific or technical committee
- member of a governmental or private advisory committee
- organizer or member of the organizing committee for a national or international symposium or conference
- review of technical and scientific papers for peer-reviewed journals and conference presentations
- review of proposals for funding agencies.
Participation in the governance of the institution and other services to the University and the Department is expected of all faculty and may be included as additional support for a tenure recommendation. Examples of such services include, but are not limited to active participation in departmental, collegiate, and University committees.

Service to the larger public community is encouraged, but is not a criterion for tenure.

Departmental service work for probationary faculty members in the Department of Mechanical Engineering should involve relatively small commitments of time, so as not to interfere with establishing successful teaching and research programs.

V. Promotion

This section describes the criteria for promotion to tenured ranks from within the Department of Mechanical Engineering. The same criteria and standards are applied for appointments from outside.

A. To the rank of associate professor (with tenure) from assistant professor (probationary)

Promotion to the rank of associate professor from the rank of probationary assistant professor in the Department of Mechanical Engineering is always accompanied by the granting of permanent tenure. A candidate for promotion to associate professor must have established a professional record that meets the requirements for effectiveness in teaching and distinction in research as set forth in Section IV. Service contributions are also included in the evaluation of the candidate, but cannot be used in place of either the teaching or the research criteria.

B. To the rank of associate professor (with tenure) from associate professor (probationary)

The granting of indefinite tenure to an associate professor on a probationary appointment requires that the candidate meet all the requirements for effectiveness in teaching and professional distinction in research as set forth in Section IV.

C. To the rank of professor

Section 9.2 of the Tenure Policy (Appendix B) specifies the general criteria for promotion to the rank of professor.

In the Department of Mechanical Engineering, candidates for promotion to the rank of professor are expected to have a record of accomplishment that exceeds that achieved for
promotion to associate professor. All associate professors are strongly encouraged to work to achieve promotion to professor. It is the responsibility of the Department Head to advise the associate professors on their progress towards meeting the criteria for promotion to professor, as outlined in this document and in 9.2 of Faculty Tenure, during annual merit review meetings and at other times. In addition, the Department Head provides feedback on performance and progress towards promotion, based on the annual deliberations of the Department’s Promotion and Tenure Committee.

A candidate for promotion to the rank of professor must have achieved a high level of professional distinction through research contributions to the candidate's discipline that are distinguished by substance, quality and creativity, and through consistently high standards in teaching. Service to the profession, participation in the governance of the institution, and other services to the department, college, and University, may be taken into consideration, but they are not in themselves bases for promotion to the rank of professor. Promotion to the rank of professor will not be granted solely on the basis of length of service to the academic unit.

For promotion to professor, the candidate is expected to satisfy the criteria specified in Section IV, with emphasis on:

- high quality research which indicates that the candidate is among the leaders in the field, as documented by letters from acknowledged national and international leaders and contributors to the knowledge base in the field
- demonstrated high quality teaching
- a record of effective advising of masters and doctoral degree candidates
- the effective advising of post-doctoral personnel in disciplines where this is appropriate

Examples of other factors that may be used to establish a candidate's professional reputation include, but are not limited to, the following:

- invitations to national and international symposia and conferences
- membership and the holding of office in professional societies
- general professional contributions such as editorships, expository writing, and other activities that enhance the professional stature of the candidate

The methods of assessment of the performance of a candidate being considered for promotion to the rank of professor are the same as those employed in the granting of tenure.

VI. Expectations for Tenured Faculty

The expectations for tenured faculty in the Department of Mechanical Engineering parallel those for the granting of tenure but take into account the different stages of
professional development and provide for flexibility so that some faculty members can contribute more heavily to the accomplishment of one mission of the Department and others to the accomplishment of other missions. Tenured faculty in the Department of Mechanical Engineering are expected to maintain an active research program, effectively teach courses as required by the Department, advise students, and serve the goals of the Department, College and University.

Faculty members are expected to remain active in research. The metrics used to assess research productivity are similar to those that are used to evaluate candidates for tenure. As a guideline, to be considered research active faculty should be at least as productive as is expected for the awarding of indefinite tenure. Faculty who are less productive in research than is required for the granting of tenure are expected to contribute more to teaching and service.

Faculty members are expected to be effective teachers. Teaching includes classroom, laboratory and individualized instruction at both undergraduate and graduate levels, the supervising of graduate students, and the advising of postdoctoral personnel. Effectiveness is gauged by several factors including, but not limited to, the contributions to the Department’s overall teaching mission, satisfactory student ratings and comments, peer evaluations, and the placement of graduate and postdoctoral advisees. As a guideline, faculty should be at least as effective in teaching as is expected for the awarding of indefinite tenure.

Tenured faculty members are expected to perform service work. Service takes the form of (1) discipline-related service, which includes both service to the profession and outreach to or engagement with the local, state, national, or international community based on one's academic expertise; and (2) institutional service, which includes administrative, committee, and related service to one's department or college, or the University. Tenured faculty members are collectively responsible for most of the institutional service work that is needed for the department, college and university to function effectively.

All faculty members are reviewed annually as part of the annual merit review process. In addition, tenured faculty members are reviewed by the department's Post-Tenure Review Committee. If the Department Head and the Post-Tenure Review Committee both determine that faculty performance is substantially below the expectations of the Department as listed in this section, the faculty member will be so advised in a letter that includes recommendations for improved performance and a time period of at least one year to demonstrate improvement. In determining whether or not a faculty member’s performance is substantially below the expectations of the Department, performance over the previous five year period will be considered. To avoid the possibility that the Department Head and the Post-Tenure Review Committee have overlooked significant activities, they will meet with the faculty member in question to discuss their concerns before they send this letter. If, after the time period specified in the letter, the faculty member’s performance continues to be below the expectations of the Department in the
opinion of both the Post-Tenure Review committee and the Department Head, then the procedures described in 7a.3 of the Tenure Policy will be initiated.

VII. Procedures

The Department of Mechanical Engineering complies with the procedures described in the Tenure Policy and the Procedures for Reviewing the Performance of Tenure-Track Probationary Faculty. Additional procedures are described in the Department of Mechanical Engineering Policies and Procedures document.

The Department of Mechanical Engineering has a regular annual cycle for reviewing the performance and progress of probationary faculty and associate professors. Each faculty member annually provides the Department Head with a detailed written summary of their teaching, research and service activities. The summary includes an up-to-date curriculum vitae as well as a detailed overview of work during the previous year. This information is reviewed by the Department Head and discussed with the faculty member during the annual merit review. The information for probationary faculty and associate professors is also reviewed by the Department’s Promotion and Tenure Subcommittee, which consists of three professors appointed by the Department Head. The tenured faculty then meet to discuss the progress of each probationary faculty member and the tenured professors meet to discuss the progress of each associate professor to decide if they should be considered for promotion. At these meetings members of the faculty have the opportunity to ask the Department Head to relay concerns they may have about progress of probationary faculty and associate professors. At these meetings the faculty decides whether or not to recommend that the faculty member be considered for promotion or (for probationary faculty members) termination.

The Department of Mechanical Engineering’s voting requirement for recommendation for granting of tenure, for promotion, or for terminating the appointment of a probationary faculty member is a positive vote of two-thirds or more of those voting (excluding abstentions), and a majority of those eligible to vote.
APPENDIX A

SECTION 7.11 OF THE REGENTS POLICY ON FACULTY TENURE

7.11 General Criteria. What the University of Minnesota seeks above all in its faculty members is intellectual distinction and academic integrity. The basis for awarding indefinite tenure to the candidates possessing these qualities is the determination that each has established and is likely to continue to develop a distinguished record of academic achievement that is the foundation for a national or international reputation or both [3] This determination is reached through a qualitative evaluation of the candidate’s record of scholarly research or other creative work, teaching, and service [4]. The relative importance of these criteria may vary in different academic units, but each of the criteria must be considered in every decision [5]. Demonstrated scholarly or other creative achievement and teaching effectiveness must be given primary emphasis; service alone cannot qualify the candidate for tenure. Interdisciplinary work, public engagement, international activities and initiatives, attention to questions of diversity, technology transfer, and other special kinds of professional activity by the candidate should be considered when applicable. The awarding of indefinite tenure presupposes that the candidate’s record shows strong promise of his or her achieving promotion to professor.

[3] "Academic achievement" includes teaching as well as scholarly research and other creative work. The definition and relative weight of the factors may vary with the mission of the individual campus.

[4] The persons responsible and the process for making this determination are described in subsections 7.3 through 7.6.

"Scholarly research" must include significant publications and, as appropriate, the development and dissemination by other means of new knowledge, technology, or scientific procedures resulting in innovative products, practices, and ideas of significance and value to society.

"Other creative work" refers to all forms of creative production across a wide range of disciplines, including, but not limited to, visual and performing arts, design, architecture of structures and environments, writing, media, and other modes of expression.

"Teaching" is not limited to classroom instruction. It includes extension and outreach education, and other forms of communicating knowledge to both registered University students and persons in the extended community, as well as supervising, mentoring, and advising students.

"Service" may be professional or institutional. Professional service, based on one's academic expertise, is that provided to the profession, to the University, or to the local, state, national, or international community. Institutional service may be administrative, committee, and related contributions to one's department or college, or the University. All
faculty members are expected to engage in service activities, but only modest institutional service should be expected of probationary faculty.

[5] Indefinite tenure may be granted at any time the candidate has satisfied the requirements. A probationary appointment must be terminated when the appointee fails to satisfy the criteria in the last year of probationary service and may be terminated earlier if the appointee is not making satisfactory progress within that period toward meeting the criteria.
APPENDIX B

SECTION 9.2 OF THE REGENTS POLICY ON FACULTY TENURE

9.2 Criteria for Promotion to Professor. The basis for promotion to the rank of professor is the determination that each candidate has (1) demonstrated the intellectual distinction and academic integrity expected of all faculty members, (2) added substantially to an already distinguished record of academic achievement, and (3) established the national or international reputation (or both) ordinarily resulting from such distinction and achievement [8]. This determination is reached through a qualitative evaluation of the candidate’s record of scholarly research or other creative work, teaching, and service [9]. The relative importance of these criteria may vary in different academic units, but each of the criteria must be considered in every decision. Interdisciplinary work, public engagement, international activities and initiatives, attention to questions of diversity, technology transfer, and other special kinds of professional activity by the candidate should be considered when applicable. But the primary emphasis must be on demonstrated scholarly or other creative achievement and on teaching effectiveness, and service alone cannot qualify the candidate for promotion.

[8] "Academic achievement" includes teaching as well as scholarly research and other creative work. The definition and relative weight of the factors may vary with the mission of the individual campus. Not being promoted to the rank of professor will not in itself result in special post-tenure review of a tenured associate professor.

[9] The persons responsible for this determination are the full professors in the unit who are eligible to vote. The outcome of the vote is either promotion to the rank of professor or continuation in rank as an associate professor. The procedures for voting are identical to those outlined in Section 7.4 for the granting of indefinite tenure, the nondisclosure of grounds for the decision (Section 7.5), and the review of recommendations (Section 7.6). In addition, a petition to the Judicial Committee for review of a recommendation of continuation in rank as an associate professor follows the procedures specified in Section 7.7 for decisions about promotion to associate professor and conferral of indefinite tenure.
APPENDIX C

SECTION 5.5 OF THE REGENTS POLICY ON FACULTY TENURE

5.5 Exception For New Parent Or Caregiver, Or for Personal Medical Reasons. The maximum period of probationary service will be extended by one year at the request of a probationary faculty member:

1. On the occasion of the birth of that faculty member's child or adoptive/foster placement of a child with that faculty member; or

2. When the faculty member is a major caregiver for a family member[2] who has an extended serious illness, injury, or debilitating condition. A faculty member may use this provision no more than two times; or

3. When the faculty member has an extended serious illness, injury, or debilitating condition.

The request for extension must be made in writing within one year of the events giving rise to the claim and no later than June 30 preceding the year a final decision would otherwise be made on an appointment with indefinite tenure for that faculty member.