

Departmental Statement

Concerning Criteria for Tenure and Promotion

This is the departmental statement concerning criteria for tenure and promotion as required by section 7.12 of the Tenure Regulations section of the Academic Personnel Policies and Procedures Manual.

I. Introductory Statement

This document describes with more specificity the indices and standards which will be used to evaluate whether candidates meet the general criteria in Section 7.11 of the Regulations. For a complete perspective, the reader is advised to review Sections 7.11 and 7.12 in their entirety.

II. Departmental Mission Statement

The Department of Electrical and Computer Engineering primarily provides upper division coursework and research experience in the field of electrical and computer engineering. This includes important courses traditionally taught in electrical and electronic engineering in addition to theory, application and design of digital systems encompassing computers and the interfacing of digital systems with various other systems. Students may choose either a computer or a telecommunications option. Graduates are prepared to enter positions in the high-tech industry, business, or government, or to pursue graduate study.

III. Criteria for Tenure

The College of Science and Engineering endorses the following standards and indices as clarification of the qualities which the College deems prerequisite to tenure. Because excellence in teaching, in research, and in service is the major goal in the College, the following document concentrates on these three areas.

The College recognizes effective teaching and distinction in research as the primary criteria for awarding indefinite tenure. In addition, a strong record of service to the profession, the University and the community will strengthen the recommendation.

A. Teaching

A department head assembling materials defining a candidate's teaching ability should answer *relevant* questions listed below. Documentation of teaching ability requires diligence because evidence used to support claims of teaching performance can be interpreted variously.

1. What has been the work load with regard to numbers of courses, students, advisees?
2. Beyond the evidence of numbers, how difficult were the individual's teaching subjects?
3. What level of teaching ability is indicated by student (interviews, surveys) and peer (classroom visitations; review of syllabi, including text, material covered, assignments, examinations)?
4. What level of teaching ability is evidenced by the subsequent performance of graduates or by the comments of graduates?
5. Did the individual significantly improve existing courses or develop valuable new ones?
6. Apart from his/her own teaching, has the individual been active in improving the quality of teaching

of the department or campus?

7. Does any research or professional activity by the candidate demonstrate commitment to high quality teaching?
8. Has the individual won any awards?
9. Does the instruction reflect scholarly activity?
10. Where the opportunity exists, has the individual contributed significantly to a graduate program?
11. Has the individual made research opportunities available to undergraduates?
12. Has the individual been effective and efficient in laboratory courses, including the supervision of teaching assistants?

With regard to the criterion of teaching, an individual's teaching ability justifies tenure when it exhibits such qualities as these:

- a. Mastery of the subject areas usually assigned.
- b. Demonstrated superior ability to speak clearly and to understand students' comments and questions.
- c. Intellectual challenge which exacts from students the high scholastic performance appropriate to a university.
- d. Demonstrated conscientious course planning.
- e. Demonstrated adroit facilitation of group learning processes.
- f. Empathy with students and understanding of their scholastic needs.
- g. Determination of grades through competent and fair measurements of students' achievement.
- h. Demonstrated willingness to communicate to students their degree of progress.
- i. Individual and cooperative effort in the development of new courses or the redesign of existing courses to respond to changing knowledge and changing student needs.
- j. Demonstrated ability and aptitude to undertake diverse teaching tasks.

B. Research

Admission to the College faculty and advancement within its ranks depend on serious commitment to and participation in the scholarly enterprise. However, some allowance must be made for variation in expectations of scholarship and creative production within the College.

Seeking mastery of one's field and sharing one's knowledge with other members of the academic community - colleagues and students - constitute the essence of scholarly and creative work. Original contributions to the knowledge and interpretation of one's own field are the most focused and enduring products of one's scholarship and creative achievement. Evidence of such work may include:

1. Scholarly books and technical articles professionally evaluated and published by reputable presses and journals.
2. Activities such as editing, reviewing manuscripts for established journals and presses, translating

scholarly or creative work for publication.

3. Participating as invited speaker, speaker or program/session chairperson in the programs of professional organizations.
4. Those kinds of consulting which involve substantial scholarly research, especially if expressed in evaluated publication.
5. Unpublished manuscripts or reports, either refereed or accompanied by competent evaluation, are also evidence of scholarly or creative work.
6. External research funding from sources outside the University by competition at a regional or national level. Efforts to obtain extramural grant support will be given important consideration in tenure decisions.

The Department deems registration as a professional engineer and patent(s) received in the relevant field as significant evidence of scholarship.

The Department encourages its faculty to engage in research, particularly sponsored applied research. It is expected that this original research, demonstrating excellence in new design and state of the art design implementation, will result in the publication. Because of the dynamic changes in the high-tech field, it is important that faculty keep up with current developments. Membership in professional societies is encouraged.

C. Service

Service of unusual distinction should receive emphasis in evaluating applications for tenure. It is important that the documentation of service in a faculty member's file be very explicit, and departments should regularly make an effort to secure information about the quality of service outside the department.

Service to the profession includes: participation in the ongoing professional activities of one's discipline. This is perceived as evidence of professional commitment and often of standing within the profession. Membership in professional societies, attendance at professional meetings, and participation in such meetings are expected. Holding an official position such as an officer, or program or section chairperson is recognized as significant service and should be encouraged. A faculty member's contribution as a consultant to press, journal, institution, industry, or government because of one's expertise may be regarded as important service.

The College recognizes that successful functioning of the University depends on faculty participation and leadership. Faculty members are expected to participate in the work of committees and similar agencies and in the management functions of their departments. In addition, community service that is related to the professional role of a faculty member, or to the improvement of University-industry relationships, may be considered an aspect of faculty activity.

VI. Promotion

A. To Assistant Professor

A faculty member lacking the terminal degree initially will be appointed at the instructors rank. However, upon completion of the Ph.D. the rank of assistant professor can be conferred. Except in rare cases, this promotion does not involve tenure.

B. To Associate Professor

Except in rare cases promotion to the associate professor rank is associated with a decision concerning tenure. If the tenure criteria as discussed earlier in this document are met, promotion to associate professor is recommended.

C. To Professor

For promotion to professor, the Department considers the following, in addition to criteria used for promotion to Associate Professor:

1. Whether the individual has demonstrated sustained research that has resulted in significant refereed publications.
2. Whether the individual's efforts have enhanced the educational goals of the Department and the University.
3. The individual's record of service contributions.

V. Procedures

The Department complies with the procedures for promotion and conferral of indefinite tenure set forth in Section 201.000 of the collective bargaining agreement between the Regents of the University of Minnesota and the University Education Association.