

UMD Department of Electrical and Computer Engineering  
Indices and Standards for Tenure and Promotion to Professor as Required by Section 7.12 of the  
Board of Regents Policy on Faculty Tenure (June 10, 2011) and  
Indices and Standards for Promotion to Associate Professor  
Approved by the Faculty on April 8, 2010  
Approved by Dean on April 12, 2010  
Reviewed by Vice Chancellor for Academic Administration on May 6, 2010  
Reviewed by the Senior Vice President for Academic Affairs and Provost on August 11, 2011  
Approved by Chancellor on December 15, 2011

## **I. Introduction**

This document describes with more specificity the indices and standards that will be used to evaluate whether candidates meet

- the general criteria for tenure as described in Section 7.11 (Appendix 1) of the *Board of Regents Policy on Faculty Tenure* (June 10, 2011) with revisions noted in the *Tenure Code Application to the UEA Contracts*,
- the general criteria for promotion to associate professor and
- the general criteria for promotion to professor as described in Section 9.2 (Appendix 2) of the *Board of Regents Policy on Faculty Tenure* (June 10, 2011) with revisions noted in the *Tenure Code Application to the UEA (University Education Association) Contracts*.

## **II. Departmental Mission**

The Mission of the Department of Electrical and Computer Engineering is to provide a high quality educational opportunity for students by delivering a program with a strong hands-on laboratory and design component in conjunction with a thorough foundation in theory and to provide students with the tools and skills to be a life-long major contributor to their profession and society as a whole.

In order for the faculty to be able to impart to the students the latest and the most recent advances in their respective fields of endeavor, each faculty member should be involved in scholarly and service activities.

## **III. Criteria for Tenure**

The Department of Electrical and Computer Engineering endorses the following indices and standards as clarification of the qualities that the Department deems prerequisite to tenure.

Because excellence in teaching, in research, and in service is the major goal in the Department, the following document concentrates on these three areas.

The Department considers 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 for indefinite tenure. The Department will evaluate the effectiveness of teaching, research and service through demonstrable activities, some examples of which are given below in each of the teaching, research and service categories. Some other equivalent activities could also be used as demonstration of effectiveness of teaching, research and service in certain individual cases.

## **A. Teaching**

Teaching is defined in the *Board of Regents Policy on Faculty Tenure* (Appendix 1):

"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".

Criteria for effective teaching include the following:

- Mastery of the subject area of primary teaching responsibility
- Dedication to quality teaching including clear and organized presentation, and conscientious course planning
- Development of new courses and innovative teaching methods
- Effective mentoring and advising of undergraduate and graduate students

Some examples of evidence demonstrating appropriate achievements of effective teaching include but are not limited to (the list is not in priority order):

1. Teaching awards and other outstanding accomplishments in instruction, including nominations, commendations, or other recognitions at local and national levels
2. Students' teaching evaluations and alumni feedback
3. Breadth and quality of senior design projects, Masters' theses or independent study reports
4. Innovations in teaching including use of new and emerging technologies
5. Planning and deliverance of course activities that relate to course objectives including design projects that require and emphasize teamwork
6. Advising students to participate in academically sound international study programs as well as multidisciplinary programs
7. Preparation of course materials including syllabi, exams, laboratory manuals, and other supplementary material
8. Advising and participating in student organizations and activities
9. Advising undergraduate students

10. Degree of professional growth related to areas of teaching
11. Participating in scholarly teaching activities including development of new techniques in teaching, publications in the area of engineering education, reviews of textbooks, authorship of textbooks, educational software, manuals, or audio or visual aids
12. Securing teaching grants or contracts for educational activities
13. Demonstrated ability and aptitude to undertake diverse teaching tasks including involvement in multidisciplinary courses and non traditional courses e.g., televised and web based courses
14. Development of new or significantly revised courses and laboratories
15. Overall course load

## **B. Research**

The *Board of Regents Policy on Faculty Tenure* (Appendix 1) defines research as follows:

“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.”

The definition above encompasses both independent and multi-authored works. The contribution of each faculty member in a given scholarly work should be carefully reviewed. Criteria for distinction in research include mastery of specific research area and sharing of knowledge to colleagues, students, and those outside academia as appropriate. Depending on nature of the research of the candidate involved, criteria for distinction in research may include the following:

- Development of a strong, well-recognized research program
- Development of a national and/or international reputation in a specific research area
- Involvement in interdisciplinary research, including leadership roles

Some examples of evidence of research productivity and scholarly activity include but are not limited to the following items (the list is not in priority order):

1. Publications in refereed journals appropriate to the academic areas in the broad ECE discipline or of multidisciplinary nature
2. Presentations of papers at national or international conferences and publications in conference proceedings
3. Publication of research monographs and scholarly review articles
4. Publications of books or book chapters
5. Scholarly products from student-faculty collaboration
6. Undergraduate and graduate research mentorship
7. Professional works such as computer programs, videos, films and other materials for dissemination of knowledge
8. Invited research presentations to professional groups in the appropriate discipline
9. Funded external and internal research grants

10. Research awards and honors granted by professional societies, government agencies, and industry
11. Patents, inventions, technology transfer, and other such developments of a significant scientific or engineering nature

### **C. Service**

The role of service is delineated in the *Board of Regents Policy on Faculty Tenure* (Appendix 1):

“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 for probationary faculty.”

Criteria for active service involvement may include the following:

- Service to the Department and the University
- Service to the profession
- Public engagement and community service that is reasonably related to the professional role of a faculty member can be an aspect of faculty activity

Some examples of active service involvement include but are not limited to:

#### **Departmental Service:**

1. Serving on departmental committees and any leadership roles within department
2. Activities associated with recruiting students

#### **University Service:**

1. Serving on thesis or dissertation committees
2. Serving on college or university committees
3. Serving on search or advisory committees
4. Serving as a representative of the university as an expert in a specialized area
5. Assisting in student recruitment
6. Engaging in special projects and conducting in-depth studies
7. Participation on boards of directors, task forces and other special purpose bodies.
8. Lectures or talks given to other departments or to the local community

#### **Professional Service:**

1. Organizing national or international symposia, workshops or conferences
2. Chairing or Co-Chairing program sessions in national or international symposia, workshops or conferences
3. Serving as a member of boards of international or national symposia or conferences
4. Delivering lectures and seminars to international or national symposia or conferences
5. Holding an officer position in professional societies, acting as referee or reviewer for funding agencies, professional journals, or text book publishers; participating in editorial boards of journals or text books and grant review panels
6. Reviewing of proposals for funding of research and development from University sources or outside agencies
7. Reviews written for refereed journals
8. Editing journal articles, grant proposals, and book manuscript
9. Lectures or talks given to other universities nationally or abroad

#### **IV. Criteria for Promotion**

##### **A. Promotion 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. Promotion 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. Promotion to Professor**

The requirements of this section are set forth in accordance with Section 9.2 of the Board of Regents Policy on Faculty Tenure. For promotion to professor, the Department will first establish that the individual meets the criteria used for promotion to associate professor. The Department requires outstanding contributions which are qualitatively and quantitatively superior to those required for promotion to associate professor.

The individual must be a recognized authority in a particular research specialty. Recognition could be evidenced by way of published work, invitation to participate in regional, national and international forums, and success in attracting external grant support.

The individual must have an outstanding teaching ability and a record of teaching excellence. Recognition could be evidenced by local or national awards, authorship of relevant texts and influential articles on engineering education, contributions to curriculum development nationally, invitations to lecture or serve as a visiting professor, and selection as editor of recognized journals or text series.

Promotion also requires outstanding performance in service activities. Consideration will be given to attainment of substantial office in professional societies, participation in professional review groups and panels, outstanding leadership within the University, and recognized professional service to the local and regional community.

## 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* that is in effect at the time of the promotion and tenure review and decision.

### Appendix 1

**Section 7.11 General Criteria (for tenure).** 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 [2]. This determination is reached through a qualitative evaluation of the candidate's record of scholarly research or other creative work teaching, and service [3]. The relative importance of these criteria may vary in different academic units, but each of the criteria must be considered in every decision [4]. 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.

[2] "**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.

[3] "**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.

[4] 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 2**

**Section 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 [7]. This determination is reached through a qualitative evaluation of the candidate's record of scholarly research or other creative work, teaching, and service. 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

[7] "**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.

### **References**

1. Board of Regents Policy on Faculty Tenure (June 10, 2011)
2. Tenure Code Application to UEA Contracts
3. Collective Bargaining Agreement between the Regents of the University of Minnesota and the University Education Association