

Department of Electrical & Computer Engineering and Computer Science
Tenure & Promotion Guidelines

Note

This purpose of this document is to outline the Department-specific Tenure & Promotion Guidelines, so as to provide clarity and amplification vis-a-vis those of the College of Engineering & Science.

Teaching

These are generally the same as the College criteria. However, a specific aspect that needs to be clarified is the need for consistent involvement in the program assessment processes of the Department that leads to the continuous improvement of its courses and programs. Additionally, efforts to enhance the teaching enterprise in other ways, such as seeking grants to improve the presentation of technical material in lecture and laboratory courses, participation in workshops with an educational theme, development of new courses, etc. are also expected.

Research & Scholarship

Research can be discipline-specific or pedagogical. Keeping in mind that it is in the nature of the professions of Electrical Engineering and Computer Science to embrace rapid technological/scientific changes, it is expected that the ratio should be approximately two-to-one between discipline-specific and pedagogical research respectively. It should be noted that this requirement has to be interpreted in conjunction with the section entitled "Publication Quality" and Table-1 that follows later on in this document.

a) Grant of Tenure/Promotion from Assistant to Associate Professor:

The College of Engineering & Science Promotion & Tenure criteria states that promotion to Associate Professor requires at least one high-level and at least 1 medium-level publication. The Department's expectations are that a minimum of three contributions (paper, funded grant proposal, and/or book) with at least one high-level and two mid-level (see Table-1 below for interpretation of contribution quality), that are based on work done after joining the ECECS Department are required. Papers published based on dissertation work completed towards the candidate's Doctorate Degree will not normally be counted, unless the work represents substantial extensions of that work, that have been carried out at UDM. While publications dealing with educational methods are encouraged, the tenure/promotion decision will be largely influenced by discipline-specific research publications in keeping with the breakdown between the two categories outlined above. In particular, if only one high-level publication is submitted in the dossier, it cannot be a pedagogical work as this would violate the Department's two-to-one ratio guideline for discipline-specific and pedagogical research work.

b) Promotion from Associate Professor to Professor:

Promotion to Professor is intended to acknowledge a distinguished career, marked by a regular program of substantive scholarly research, teaching excellence, and noteworthy contributions to the Department/College. In particular, it is expected that the applicant has developed special expertise in her/his domain-specific research area. This expectation informs the publication requirements outlined below.

The College of Engineering & Science Promotion & Tenure criteria states that promotion to Professor requires at least two high-level and at least four medium-level publications, with three of these since promotion to Associate Professor. The Department's expectations are that a minimum of four conference paper publications (mid-level) and two journal paper publications (high-level), based on work done after the promotion to Associate Professor and grant of tenure are expected (also see Table-1 below for interpretation of contribution quality). While publications dealing with educational methods are encouraged, the decision on promotion to the

rank of Professor will be primarily influenced by the quality of the discipline-specific research publications (even as the minimum split between the two categories as outlined above applies).

Research grant proposal development and submission to either government or industrial sponsors are expected. Proposals should request a minimum of \$50,000 to be considered. Successful proposals are not specifically required, but the quality of the reviewer comments will be considered relevant. Re-submission of revised proposals is encouraged. A minimum of two significant proposal efforts are expected for promotion to Professor.

Publication Quality

The conferences and journals in which publications are accepted should have rigorous acceptance practices (e.g., peer reviewed with at least two reviewers). For example, many IEEE conferences base acceptance on complete paper draft submission, as opposed to abstract-only. Multiple authorship papers will be critically evaluated as to the candidate's contribution. Furthermore, all publications are expected to contribute original work and demonstrate a steady, mature, and coordinated research program that strengthens the candidate's expertise in a specific area.

When assessing publication quality, a number of factors are weighed such as authorship (see discussion above), impact factor of the conference or journal in which the paper was published (which includes consideration of factors such as the mode of submission of the paper, the acceptance rate of the publication), etc. While it is impossible to provide a comprehensive listing of all conferences and journals, Table-1 below includes some examples, along with associated quality levels.

Please note that 4 low-level contributions will have an equivalence of a single medium-level contribution. Furthermore, this equivalence can only be availed of once per application.

Service

While the Department service criteria is broadly the same as that of the College, this section identifies certain service activities that are very important to the productivity of the Department and its ability to function efficiently. The activities associated with continuous improvement and assessment have been listed under the "Teaching" section above, since they are inseparable from good teaching practices. A non-exhaustive list of examples of other service activities of importance are:

- Acting as an advisor in Master's and Doctoral theses.
- Taking part in Industrial Advisory Council meetings.
- Serving as an officer in local and national professional society chapters.
- Acting as an advisor for student chapters of professional and honor societies.
- Supporting activities that further the Mission of the College and University.
- Serving as Program Director, Associate Chairperson, or Chairperson
- Serving as Department assessment coordinator

It is recommended that a faculty members with Assistant Professor rank would focus primarily on teaching and research activities, whereas those faculty with Associate Professor rank would be expected to increase service contributions.

The description above represents general guidelines and expectations. For all categories of evaluation, the Department Promotion & Tenure Committee will make the final determination of acceptability based on interpretation of the submitted dossier.

Table 1

Level	Types (from CES Tenure and Promotion Guidelines 4/2016)	Examples for Department of Electrical & Computer Engineering and Computer Science
High	<ul style="list-style-type: none"> • Peer-reviewed publications in national or international journals in the discipline • Patents granted*** • Funded proposals as PI or Co-PI for \$50K or greater to industrial, national or international organizations such as National Science Foundation** • Books adopted outside of UDM* • Education journals (e.g., ASEE Journal of Engineering Education, IEEE transactions on Engineering Education) 	<ul style="list-style-type: none"> • Institute of Electrical and Electronic Engineers Journals (IEEE), ACM, SIAM, and other similar computer science and software engineering publications. • Other flagship publications of major organizations (ACM, Elsevier...) • Education journals (e.g., <i>American Society for Engineering Education</i>)** • Funded proposals (Grant or Contract) (as a Principal Investigator or Co-PI) supported by local or regional organizations greater than or equal to \$50K, e.g. GVSC, Novatel, etc.
Medium	<ul style="list-style-type: none"> • Peer-reviewed publications in Highly ranked national or Highly ranked international conferences in the discipline • Peer-reviewed publications in local or regional journals in the discipline • Books and book chapters adopted internally to UDM* • Funded proposals or grants (as a Principal Investigator or Co-PI) supported by national, local or regional organizations for \$25K or greater and under \$50k 	<ul style="list-style-type: none"> • Funded proposals (Grant or Contract) (as a Principal Investigator or Co-PI) supported by local or regional organizations for \$25K or greater and under \$50k, e.g. GVSC, Novatel, Denso, Ford, etc. • Education Conference (e.g. <i>IEEE FIE – not ASEE...</i>)** • SAE World Conference
Low	<ul style="list-style-type: none"> • Peer-reviewed publications in regional conferences in the discipline • Non peer-reviewed publications in national or international journals in the discipline • Non peer-reviewed publications in local or regional journals in the discipline • Non peer-reviewed publications in national or international conferences in the discipline • Non peer-reviewed publications in regional conferences in the discipline 	<ul style="list-style-type: none"> • Education regional: (e.g., <i>ASEE – North Central</i>)** • Poster or oral presentations in the scientific sessions at national conferences (not student sessions) • Poster or oral presentations in the student sessions at national scientific conferences • Poster or oral presentations at local or regional scientific conferences • Note that all non-peer-reviewed publications are considered low level for ECECS faculty • Regional annual conferences of ASEE, etc. (some publications in local or regional conferences may be considered medium level if a case can be made regarding the rigor of the review process) • Funded proposals (Grant or Contract) (as a Principal Investigator or Co-PI) supported by local or regional organizations under \$25K, e.g., Ford Blue Oval, Denso, Trimble, etc.

Level	Types (from CES Tenure and Promotion Guidelines 4/2016)	Examples for Department of Electrical & Computer Engineering and Computer Science
	<ul style="list-style-type: none"> • Funded proposals or grants (as a Principal Investigator or Co-PI) supported by national, local or regional organizations under \$25K • Team supervision for national or international competition where the team places in the top 10 for large individual events and in the top 20% for smaller individual events. • Invited talks 	<ul style="list-style-type: none"> • Invited talks such as Keynote speaker at a major conference • IGVC Competitive Team that places in the top 10 in an individual (autonomous or self-driving, design, IOP etc.) and competing in all relevant events (e.g., IOP, AutoNav, Design). SAE Formula Hybrid competition with a final rank in the top 20% of the teams attending.

*The levels listed are for the first edition of a book or book chapter, but subsequent editions are one level lower. Can be used once for all T&P applications.

** Can be used once for all T&P applications, but the department committee can make reasonable adjustments.

*** Scope of patent is very relevant for consideration in this category. Department committee will make recommendations.

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