

Electrical and Computer Engineering Interpretation of Recontracting and Tenure Criteria for Tenure Track Faculty

Approved by the Electrical and Computer Engineering Faculty – September 2020

2.4 Department Responsibilities

2.41 Statement Interpreting the Criteria: Each year, before the evaluation of eligible candidates, the Electrical and Computer Engineering Department (including part-time faculty and staff will prepare and formally ratify a statement interpreting the criteria to be utilized in evaluating candidates for recontracting.

2.44 Role of Chairperson or Department Head: The Department Head of the Electrical and Computer Engineering Program serves as an ex-officio member of the Departmental T&R Committee. The Department Head does not chair the committee and does not vote on the committee's evaluation of the candidate; however, the Department Head may participate in the committee discussion, and writes a separate evaluation of the candidate based on the candidate's portfolio and the committee discussions. Department Head's evaluation letter becomes part of the candidate's portfolio, and is then provided to the College T&R Committee, the Dean, the Senate and the Provost to assist in their evaluation of the candidate.

2 TERMINAL DEGREE STATEMENT

The terminal degree for the faculty at assistant professor or above in the Electrical and Computer Engineering program is a Ph.D. in Electrical or Computer Engineering, or related areas.

3 CRITERIA FOR EVALUATION OF CANDIDATES FOR RECONTRACTING

The Department of Electrical and Computer Engineering within the College of Engineering strongly believes that its success is strongly tied to sustained excellence of its faculty members in the primary areas of research, teaching and service. Therefore, we believe it is important that faculty aspiring for tenure develop an appropriate strategy that fulfills requirements set forth by the College and University guidelines. In addition, departmental guidelines described herein are developed to provide an additional layer, or set of criteria, as a foundation for an overarching development plan.

Consistent with the Rowan University Memorandum of Agreement, recontracting and tenure are based on teaching effectiveness, scholarly activity and service to the university and profession. In general, we value – and therefore weigh – excellence in both teaching and scholarship / research equally, followed by excellence in service.

The Department of Electrical and Computer Engineering uses Candidate's record and his/her statement of self-appraisal interpreting that record in the following areas as the basis for assessing faculty in teaching, scholarship and service as required for recontracting and tenure.

1. Classroom observations, scores on student evaluations, and any other objective metric of professional teaching performance;
2. Scholarly activities, including refereed journal publications and seeking/obtaining external funding for scholarly activities;

3. Contributions to the Department, College and University;
4. Contributions to the engineering profession;
5. Candidate statement of goals and plans for future professional development in all of the aforementioned areas.

Criteria for Teaching Effectiveness

Assessment of teaching effectiveness reveals a faculty member's ability and commitment to the enterprise of teaching. Activities consistent with continuous development and improvement of innovative engineering programs are essential. Tenure track faculty are expected to become master educators in teaching a variety of courses in traditional lecture type courses, laboratory courses, and clinic projects. Tenure track faculty are also expected to play an active role in laboratory and curriculum development, and maintaining a modern and innovative ECE curriculum, as well as assessment of our learning goals and outcomes. The characteristics of teaching effectiveness are provided in the Appendix A of *Rowan University Recontracting and Tenure Memorandum of Understanding* and Section 4.1 of the *Rowan University Promotion Document*.

Evaluation of teaching effectiveness will emphasize student learning. Evaluation includes assessment of engineering core and elective courses, clinics, laboratory and curriculum development, and effectiveness of teaching as measured by peer review, outcomes assessment and student evaluations. Evidence of teaching quality includes developing a working knowledge of pedagogical techniques and incorporating appropriate technology into the spectrum of undergraduate courses, graduate courses, and workshops.

Criteria for Scholarly Achievement

Each faculty member is expected to maintain currency within his/her chosen field and contribute to the knowledge base within that field. It is expected that such efforts will address the Department and College missions of providing students with a leading edge educational experience at all levels.

Scholarship and research activity is recognized in three general categories: traditional technical engineering research and scholarship, research/scholarship in engineering education, and the scholarship of practice. Traditional research can be fundamental (theoretical) or applied and be quantifiable by norms utilized in the profession such as refereed journal papers, refereed conference publications, external grants obtained to support the research, etc., as listed in the Appendix A of Rowan University Tenure and Recontracting Memorandum of Understanding.

Educational research that contributes to the engineering field should also be quantified by those norms mentioned above. The scholarship of practice involves applying technical engineering skills to solve a real-world problem for a client or other external sponsor, and can be quantified by the number, scope and funding levels of the projects supported by the external sponsor, the outcomes of the faculty member's publication or dissemination efforts, as well as any other relevant objective measure that indicates the impact of the work done. All forms of scholarly

activities must be externally validated and extend beyond works performed as part of completion of the faculty member's dissertation research.

An Assistant Professor shall be actively engaged in scholarship and research and is expected to publish in refereed journals and to be continually seeking external funding for their research efforts. Demonstration of progress in research will be evident from the quantity and quality of refereed publications. There should be an appropriate balance of journal papers and conference proceedings (all peer reviewed), along with a high quality of professional presentations. The candidate should have a successful record of proposals, awards and extramural funding. The application for and receipt of patents and proprietary inventions is also an important contribution.

Faculty members are expected to develop a self-supporting and sustained program of scholarly achievement that involves students directly. Both traditional technical and educational scholarship must be validated through a balance of peer-reviewed publications, conference proceedings, presentations, technical reports, technical bulletins and external funding. Directly involving students in these scholarly activities is strongly encouraged.

Receipt of awards for scholarly activity may also serve as external validation. Examples of these awards include but are not limited to faculty/student outstanding paper, oral or poster presentation award, outstanding research awards given through professional societies or other relevant organizations and sponsors.

In the event that there are documented confidentiality agreements with a sponsor and external publication/dissemination is impractical, evaluative letters from project sponsors may be used to validate the scholarship of practice.

Because the engineering clinics represent an essential hallmark of the Rowan Electrical and Computer Engineering Program, all tenure-track / tenured faculty members are expected to participate in developing meaningful student projects, obtaining external funding to support these projects, and disseminating the results. These projects may involve basic or applied research. They may also enable the faculty member to pursue the scholarship of practice by working directly with a sponsor on technical projects. Funding for this activity may come in the form of government grants, in-kind support, or corporate sponsorship. The external validation of this type of scholarship should be done as described previously.

It is expected that an Assistant Professor will have a scholarly development plan addressing *future research and scholarship* efforts. This plan should be consistent with the general area(s) of focus that the faculty member was hired for and in consultation with their Department Head/Dean. The application for tenure must include letters of recommendations from recognized experts in their field(s) of study. The procedure by which the experts are solicited, and how their input is used, is provided in the College of Engineering Promotion Document.

Criteria for Professional Service

All faculty members are expected to engage in and share the activities of professional practice and service to the Program, College, University and Profession. The nature of this activity is

provided in *Appendix A of Rowan University Recontracting and Tenure Memorandum of Agreement*. Due to the multi-faceted nature of service, it encompasses a wide range of activities. While examples are provided in the *Appendix A of the Tenure and Recontracting Memorandum of Understanding*, many dimensions of service exist and are worthy of recognition if a professional or societal contribution is made. However, service to the Program and College is considered the most important. Supporting letters from peers can be provided as needed.

4. COVID 19 STATEMENT

Consideration shall be given to all members who include an impact statement in their package and whose review falls within the period where the pandemic may have had an impact on their performance in any of the three areas.