

DEPARTMENT OF INDUSTRIAL AND MANUFACTURING ENGINEERING

Criteria and Procedures for Promotion and/or Tenure Evaluations¹

1. Introduction

This document is intended to provide guidelines for making decisions regarding promotion and/or tenure of faculty in the Industrial and Manufacturing Engineering (IME) Department in accordance with the broader Promotion, Tenure and Evaluation Policy of the College of Engineering, Section 352 of the University Policies and Procedures Manual, and the North Dakota State Board of Higher Education Policies. These guidelines provide additional material to identify specific factors that apply to the Department of Industrial and Manufacturing Engineering in evaluating the faculty in the department. To ensure objectivity, performance evaluations must utilize criteria which are clearly understood, and are consistent with the expectations of the IME Department, the College, and the University.

The evaluation of a faculty member for promotion and/or tenure should be based upon the individual's performance in his/her assigned work load over the time period under review. Promotion/tenure review is a peer review process originating at the Department and proceeding to final approval of tenure at the State Board of Higher Education. During this process, many reviewers may not be personally familiar with a candidate's work or discipline. Thus, a faculty candidate is strongly encouraged to produce an application document that records effort and achievement in a manner convincing to someone with limited knowledge of the individual's specific field (and its unique demands). Although this document provides guidelines for the preparation of the application document, the fundamental responsibility for making a case to support a promotion and/or tenure decision lies with the individual faculty candidate.

2. Mission and Goals of the Department

The IME Department has a three-fold educational mission. The teaching mission is to provide high quality undergraduate and graduate programs in industrial engineering and management, and manufacturing engineering. The research mission is to advance knowledge of industrial and manufacturing engineering, strengthen and support industry, and enhance teaching. The service mission is to participate in faculty governance, in the broader community of the engineering profession and its disciplines, and in the land-grant mission of the university through engagement in state, regional and national affairs.

¹ Approved by IME faculty vote on April 6, 2017

3. College of Engineering Expectations

The College of Engineering (COE) Promotion, Tenure, and Evaluation (PTE) Procedures and Criteria document defines the College expectations for faculty using the concept of Scholarship defined as “... *creative, systematic, rational inquiry into a topic and the honest, forthright application or exposition of conclusions drawn from that inquiry. It builds on existing knowledge and employs critical analysis and judgment to enhance understanding.*” Section 3 of the COE PTE document provides an extensive discussion and includes examples of Scholarship in the areas of Discovery, Integration, Application, and Teaching.

This concept of Scholarship is integrated in the IME PTE document. The PTE process must be used to develop the Scholar in a fair, transparent, and open manner. It mandates as the responsibility of faculty members to explain how the six criteria of scholarship (Clear Goals, Adequate Preparation, Appropriate Methods, Significant Results, Effective Presentation, and Reflective Critique²) are present in their teaching, research, and service responsibilities. A major focus in the PTE process, therefore, will be the narrative that documents scholarly development. Annual reviews and regular, unbiased feedback to the faculty member throughout the faculty employment are an essential part of the PTE process, required to enhance the scholarly development of all faculty members. The reviews and feedback must also address the six criteria noted above.

4. University Expectations

University Policy (Section 352) recognizes teaching, research, and service as the three areas in which faculty members are expected to contribute towards the mission of the university. The university policy also expects each academic unit to specify the relative emphasis on teaching, research, and service of the unit and to specify the relative proportion of time assigned to teaching, research, and service to individual faculty members.

Consistent with University Policy (Section 352), it is within the authority of the university administration to grant credit toward early promotion when substantial previous, relevant experience has been documented in the original letter of appointment (hiring contract). Within the College of Engineering, the level of “exceptional academic accomplishment” prior to appointment at NDSU is regarded as rare. Probationary-period faculty members are encouraged to take full advantage of the customary six-year period appropriate to demonstrate effectiveness within the context of this institution. Faculty committees of the department and the college are bound by the original letter of appointment and the candidate’s position description. Evidence of achievement in the areas of teaching, research, and service shall be evaluated based on a level of documented activity in all areas equivalent to that expected from six-years of service at NDSU.

Collegiality, as defined by University policy, enhances the ability to be effective in teaching, research, and service. Faculty members are encouraged to contribute to collegiality in the Department by being ethical, courteous, and helpful to others, as well as respectful of others in all aspects of conduct.

² Refer to the College of Engineering PTE Bylaws for definitions and examples

5. General Areas of Expectations

Promotion and tenure decisions are based upon the candidate's activities in:

5.1. Teaching, Advising, and Curriculum Development

Teaching scholarship refers to the broad area of student/faculty interaction for educational purposes. Teaching encompasses not only classroom activities but the full range of activities which result in educational and professional development of students. Teaching scholarship may include outreach and extension educational programs directed primarily toward clientele outside of the university. The College expects each faculty member to be a competent teacher and advisor who cares about student learning and is a knowledgeable and skilled communicator.

The faculty member should provide a personal narrative with a portfolio of evidence to demonstrate competency as a scholarly teacher and advisor. The personal narrative should highlight the following with regards to the faculty member's teaching responsibilities: clear and appropriate goals, adequate preparation, use of appropriate methods, significant results, and effective presentation. The narrative should also integrate a reflective critique of the scholar's own work highlighting changes that have been made in teaching methods along with the motivations for, and results of, those changes. The narrative should synthesize the scholar's body of teaching responsibility with reference to supporting evidence outlined below. It is important to note that a compilation of evidence is not sufficient, in and of itself, to demonstrate scholarly teaching competency. Rather, that evidence must be integrated in a cohesive narrative.

5.2. Research

Research scholarship includes activities that focus on discovery and integration related to a scholar's defined area(s) of scholarship. Such areas may include foundational science, applied engineering, or instructional pedagogy.

Faculty members should provide a personal narrative with a portfolio of supporting evidence demonstrating scholarly research competency in their area(s) of expertise. The personal narrative should highlight the following with regards to the faculty member's research program: clear and appropriate goals, adequate preparation, appropriate methods, significant results, and effective presentation. The narrative should also integrate a reflective critique of the scholar's own work which informs future scholarly activities. The narrative should synthesize the scholar's body of work with reference to supporting evidence outlined in Section 6.2. It is important to note that a compilation of evidence is not sufficient, in and of itself, to demonstrate scholarly research competency. Rather, that evidence must be integrated in a cohesive narrative.

5.3. Service

The Department expects service contributions in both faculty governance of the institution and professional service to the state, region, and nation. All faculty members are expected to contribute materially to the faculty governance of the IME Department at all times. Over the course of a faculty member's service at the institution, increasing faculty governance contributions are expected at the college-level and then at the university-level. Service to the profession could be in

the form of leadership in professional societies, professional expertise to local public and community projects, professional outreach activities in the region, and representation of NDSU on local, regional, national, and international committees and boards.

Scholarly service involves the same critical and reflective components that faculty apply to teaching and research: clear and appropriate goals, adequate preparation, appropriate methods, significant results, effective presentation, and critical reflection. The faculty member should provide a personal narrative with a portfolio of supporting evidence to demonstrate a scholarly approach and contributions in service activities. The personal narrative should highlight the faculty member's personal role and scholarly contributions to the service activities. The narrative should also include a reflective critique of the service activities of the faculty member. It is important to note that compilation of evidence alone is not sufficient. Rather, that evidence must be integrated in a cohesive narrative pointing to the growth and active participation in scholarship of service.

6. Evidence of Accomplishment

The IME faculty recognizes the importance of measuring and documenting faculty achievement. For each of three areas of the IME mission, categories of achievement are organized into two sections. The first section, termed "Fundamental", lists categories of evidence viewed as necessary and critical to the successful faculty job performance. The second section, termed "Supporting", lists categories of evidence that are not absolutely necessary but are valuable contributions that provide additional support to the work performed in the "fundamental" categories. These lists are meant as a guide for faculty on a traditional faculty appointment (i.e., 40% teaching, 40% research, and 20% service). Expectations in each mission area may be adjusted given actual job assignments departing from the traditional faculty position description.

6.1. Teaching Achievement Categories:

"Fundamental" Categories:

- Student evaluation of teaching effectiveness including summary data for all Student Rating of Instruction (SROI) questions
- Course, instructional laboratory, and curriculum development
- Instructional materials including manuals and textbooks
- Summaries of feedback from student evaluations of advising
- Peer and/or other professional evaluations of course content, teaching methods, improvement of instructional programs, and course or program assessment
- Presentations at regional and national meetings on innovative instructional and assessment techniques
- Other documentation of innovative methods to evaluate student learning
- Effective supervision of graduate students toward completion of dissertations and theses
- Active involvement in accreditation activities

"Supporting" Categories:

- Mentoring students
- Receipt of awards or special recognition for effective teaching or for advising students and/or organizations

- Participation in professional development related to improving teaching effectiveness
- Offering or contributing to continuing education courses and workshops including evaluation of course content and delivery
- Participation in professional development related to improving teaching effectiveness

6.2. Research Achievement Categories:

"Fundamental" Categories:

- Pursuit and success in obtaining external funding to support scholarly research goals.
- Publication of original work related to the individual's scholarly goals in books and refereed archival publications appropriate to the scholarly field
- External peer evaluations of faculty scholarly research contributions such as evaluations of research proposals and reviews of manuscripts
- Invited technical presentations at national and international conferences
- Developing or directing collaborative scholarly investigations with external (industrial, academic, and governmental) partners
- Building infrastructure to support research goals

"Supporting" Categories:

- Participation in multidisciplinary and intercollegiate research activities
- Publication of original work in non-peer-reviewed publications
- Research patents
- Presentation of original work related to the individual's scholarly goals at regional, national, or international conferences
- Externally requested technical reports
- Undergraduate research projects
- Awards or other recognition within the faculty member's discipline for research accomplishments
- A strong record of publication citations

6.3. Service Achievement Categories:

"Fundamental" Categories:

- Faculty governance, proportional to the faculty rank and seniority, for the effective operation of the IME Department, the college, and the university.
- Service to technical, professional, and scholarly societies such as participating in committee activities, organizing and/or chairing conferences, reviewing manuscripts and proposals, and serving as an editor or on the editorial board of journals
- Leadership roles in any of the above service categories
- Professional service to the state and region
- Involvement in educational and/or research and/or professional outreach
- Contributions to fostering a campus climate that supports and respects faculty, staff, and students who have diverse cultures, backgrounds, and points of view

"Supporting" Categories:

- Advising a departmental or college student organization

- Outreach activities through consulting with local industry
- Community service activities
- Local industry development activities
- Mentoring faculty
- Non-remunerative consulting in one's area(s) of expertise

7. Criteria for Promotion, Tenure, and Maintenance of Rank

IME faculty must have a demonstrated record of high quality contributions in each of the three areas of teaching, research, and service to obtain promotion and/or tenure. The general criteria for promotion and/or the awarding of tenure are the achievement of satisfactory performance as described above in all three areas of the IME mission - teaching, research, and service – and excellence in one or more of them. The level of activity in any one area may vary depending on the individual's job description and work assignment.

A recommendation to award tenure should rest on criteria that reflect the potential long-term contribution of the faculty member to the purposes, priorities, and resources of the institution, college, and department. A recommendation for promotion should recognize sustained levels of excellence in the scholarship of teaching, discovery, and service. The two promotion levels are from assistant to associate professor and from associate to full professor.

7.1. Promotion from Assistant to Associate Professor

Professional registration and/or participation in continuing education activities, scholarly growth in the faculty member's academic field, and growth in professional practice are some indicators of professional development.

7.1.1. Teaching

For promotion from Assistant to Associate Professor, the faculty member shall demonstrate scholarly teaching competency. This competency should be demonstrated through an organized narrative, as outlined in Section 3. The faculty member shall be a proficient instructor for all courses taught. The faculty member shall also be a proficient advisor to all assigned undergraduate and graduate students. “Proficient” means knowledgeable in the subject(s) taught, effective in communication, and competent in assessing student learning.

7.1.2. Research

For promotion from Assistant to Associate Professor, faculty members shall demonstrate scholarly research competency in their area(s) of expertise as evidenced by peer-reviewed publications, the pursuit and success in obtaining external funding, and effective guidance of graduate research. This competency should be demonstrated through an organized, cohesive narrative, as outlined in Section 3.

7.1.3. Service

For promotion from Assistant to Associate Professor, the faculty member shall demonstrate scholarly participation and growth in service at the University and to the Profession. This activity should be demonstrated through reflective narrative, as outlined in Section 3. Active and meaningful participation in Department, College and/or University committees is required to achieve

the rank of Associate Professor unless hiring at this level. Consistent and appropriate service to the Profession and participation in professional societies is also required.

7.2. Promotion from Associate Professor to Professor

The level of performance for this promotion will substantially exceed that required for promotion to Associate Professor. Promotion to full professor represents a significant accomplishment beyond the requirements at the associated professor level. There are no time-in-service requirements for promotion from associate to full professor. However, the promotion decision will be based on the faculty's work since being promoted to associate professor and a reasonable time-in-service expectation would be a period of five years or more. Promotion to professor must include a documented record of leadership performance and professional recognition at the national level. Leadership in regional, national, and international professional organizations and/or service in an advisory capacity to government and industry agencies are some indicators of professional growth.

7.2.1. Teaching

For promotion from Associate Professor to Full Professor, the faculty member shall demonstrate a continued progression of scholarly teaching and participation in curriculum development. The expectation for promotion to Full Professor is that the faculty member demonstrates a significantly higher level of achievement and recognition than for promotion to Associate Professor. Integration of new models for student learning and integration of research into the instructional of students is particularly encouraged. The responsibility is on the faculty member to explain the progression in teaching scholarship in the reflective narrative as outlined in Section 3.

7.2.2. Research

For promotion from Associate Professor to Full Professor, the faculty member shall demonstrate a continued progression of scholarly work and research leadership. The expectation for promotion to Full Professor is that the faculty member demonstrates a significantly higher level of achievement and recognition than for promotion to Associate Professor. The responsibility is on the faculty member to explain the research progression and leadership in the reflective narrative as outlined in Section 3.

7.2.3. Service

In addition to those requirements for promotion from Assistant to Associate Professor, the faculty member must demonstrate a continued progression in breadth and depth of scholarly service and outreach activities. The expectation for promotion to Full Professor is that the faculty member demonstrates involvement in significantly higher levels of service activities than required for promotion to Associate Professor. Leadership in professional activities and/or public service in one's area(s) of expertise is required for promotion to Full Professor.

7.3. Tenure

An applicant for tenure is expected to meet the same criteria for promotion from Assistant to Associate Professor. In addition, the faculty member should demonstrate long-term potential value

to the Department, College, and University based on scholarly teaching, research program, and scholarly service activity that aligns with the institutional mission.

Full Professors are expected to maintain their work (i) as teaching scholars by continuing to improve the transfer of knowledge, (ii) as research scholars by continuing to search for new knowledge, and (iii) in scholarship of service through thoughtful and active participation in Department, College, and University governance as well as broader service to the Profession and community, in all three areas following the principles of Scholarship outlined above.

8. Composition of the Department PTE Committee

8.1 Composition

The IME PTE committee will consist of all tenured faculty members in the department who have completed at least three years of full-time appointment with the university (NDSU Policy 352.5.2), excluding the department chair and any others with administrative functions.

8.2 Exclusions

Faculty members being considered for promotion and/or tenure may not be involved in any candidate review and recommendation process, including the selection of external reviewers, while under consideration. A college PTE committee member who has voted on the promotion/tenure of a candidate in the department PTE committee shall be recused from the vote by the college PTE committee. In such a case, college policy shall determine whether the committee member may or may not deliberate with the committee on the candidate.

8.3 Promotion to Full Professor

For applications for promotion from associate to full professor, all members of the IME PTE committee must be at the rank of full professor. In such case that there are not at least three eligible faculty members from the Department to form the committee, the required additional representatives will be selected from eligible COE faculty by the IME PTE committee. The role of this committee will be to provide guidance and feedback to faculty seeking promotion or tenure and to evaluate applications for promotion and tenure.

8.4 Required training

Prior to commencement of deliberations, the chair of IME PTE committee must have received PTE committee training within the last three years, provided through the Office of the Provost.

9. Procedures

Faculty intending to apply for Promotion and/or Tenure will prepare the necessary documents of support based on guidelines and due dates followed by the COE PTE Committee. In addition, the following procedures are specified by the IME Department.

9.1. Review and Evaluation

For probationary faculty, the basis for review of the candidate's portfolio and any recommendations on promotion and/or tenure shall be the promotion and tenure guidelines and criteria of the department which were provided to the candidate at the time of the candidate's appointment to the position. The department chair has the responsibility to provide to the appointee these documents along with a position description, contract, or other document that constitutes a tenure or

work plan. Tenured candidates for promotion to professor shall be evaluated by the criteria in effect at the time of application.

9.1.1. Tenure-track Faculty

i. Yearly Review and Evaluation by Chair and Department PTE Committee

The Department Chair and the individual probationary faculty member will establish objectives and review the faculty position description on an annual basis. At the beginning of each calendar year the department chair and the individual tenure-track faculty member, after mutual discussions, will establish goals and define tasks for two levels of performances: “satisfactory” and “excellent.” The established goals and tasks will provide a basis for performance review at the end of each year as stated below.

At the end of each calendar year, each tenure-track faculty will complete an activity form summarizing research, teaching, and service activities. This yearly activity form will list measures of activity in teaching, research, and service in accordance with the department’s prioritized list of activity measures. The summary and an updated, cumulative curriculum vita will be also provided to the Department PTE committee and Department Chair.

Each candidate will be given a written report by the Chair and the Department PTE Committee with comments on performance and an assessment of the faculty member’s progress toward tenure and promotion. Assessments should be rated as:

Acceptable: Candidate is making satisfactory progress toward tenure and promotion.

Improvement plan required (marginally meeting expectations): If either the Chair or the Department PTE committee recommends an improvement plan, the faculty member will meet with both the Chair and PTE committee to discuss the review and the required areas of improvement. The faculty member will write an improvement plan based on this feedback and the plan should be reviewed and signed by all parties. The signed plan and a summary of progress made towards the plan must be included in the following year’s annual review.

Unacceptable: If either the Chair or the Department PTE Committee make a recommendation for non-renewal, their reports (recommendations) shall be submitted to the COE for review by the Dean and the College PTE committee. The four recommendations shall then be submitted to the Provost. The non-renewal process shall be carried out according to NDSU Policy Section 350.3.

This written report will be signed by the faculty and placed in the faculty's file. The purpose of this review process is to emphasize areas of improvement and not to penalize individual members of the department.

ii. Third-Year Review and Recommendation by Chair and Department PTE Committee

For third year reviews, the probationary faculty member will prepare a portfolio as defined by the current NDSU Guidelines for Promotion and Tenure Portfolio Preparation including all annual evaluations by the Chair and Department PTE committee in accordance with NDSU Policy

352. Completed portfolios will be submitted for review by the Department Chair, Department PTE Committee, the COE Dean, and the COE PTE committee. It is the faculty member's responsibility to provide all parties with a copy of their portfolio. The faculty will be given a written report by the Chair and the Department PTE Committee with comments on performance and an assessment of the faculty member's progress toward tenure and promotion. Assessment uses the same rating as the rating used for the annual evaluations. The evaluation letters are placed in the faculty portfolio. The faculty will have 14 calendar days to respond in writing to the evaluation letters.

iii. Last Year of Probationary Period Review and Recommendation by Chair and Department PTE Committee

At the beginning of the last year of the probationary period, both the Department PTE Committee and the Department Chair will evaluate the applicant's record and submit individual recommendations for tenure/promotion to the College PTE Committee and the COE Dean by November 1 in accordance with NDSU Policy 352.

9.1.2. Promotion

When a faculty member from a Department is evaluated for promotion, the evaluations by both the Department PTE Committee and the Chair/Head shall be forwarded to the Dean and the College PTE Committee.

9.1.3. Early Promotion and Tenure

For a faculty member without previous academic-relevant experience, eligibility for tenure requires a probationary period of six years and in this case, evaluations for promotions to Associate Professor and granting of tenure are conducted concurrently. Within this probationary period, faculty members who have demonstrated exceptional academic accomplishments may be eligible for early promotion (without tenure) prior to the completion of the six years of the probationary period. Petitions for early promotion shall be initiated by Department Chair, and not by faculty members themselves.

A faculty member with relevant professional /academic experience at the time of initial NDSU appointment may be awarded credit toward tenure. Awarded credit must be stated in the original hiring contract. There are two options:

1. Faculty may be hired with one to three years of tenure credit (maximum allowed) and then would apply for promotion and tenure prior to the sixth year of academic service. For example: given one year of credit, the promotion and tenure application would be due in the fifth year of service; given three years of credit, the promotion and tenure application would be due in the third year of service.
2. Faculty may be allowed the full six-year probationary period with the option of applying for promotion and/or tenure at any time following three years of academic service.

In either option, failure to achieve tenure will lead to a terminal year contract.

9.1.4. Extension of Probationary Period

According to NDSU Policy 352 Section 3.6, a faculty member may request an extension of the probationary period not to exceed three years based on institutional, family or personal circumstances. The request may be made any time during the probationary period prior to the sixth year (or prior to the year in which the portfolio is due). Written notification to the Provost must be submitted within one year of the beginning of the event for which the extension is requested and approved prior to July 1 of the year in which the tenure/promotion portfolio is due. A faculty member who submits an extension request during the academic year in which they are to undergo third year review must successfully undergo third-year review and renewal before any extension can take effect. The request must be in writing and will be submitted to the Provost who will review the request and will approve or deny the request. Denial of an extension may be appealed under University Policy 350.4.

9.1.5. Post-tenure Review

Consistent with the Scholarship development model of the IME PTE process, tenured faculty members will periodically present a portfolio for review to encourage continued growth in teaching, research, and service. Portfolios will be reviewed by IME Department and College PTE Committees and will be used to provide constructive feedback. Associate Professors will submit a portfolio for review every four years after achieving rank and Professors will submit a portfolio every six years after achieving rank. The portfolio should consist of an updated CV, and narratives describing scholarly development in the areas of teaching, research, and service as outlined in Section 6, above, and the annual performance reports provided by the Department Chair/Head since the last review. Faculty are encouraged to use appendices to include other documentation that will help the committees understand the faculty member's progression of scholarship and provide appropriate feedback. Such documentation may include external reviews of research, manuscript or grant proposal review comments, peer reviews of teaching, or documentation of professional service activity and accomplishments. Feedback will be returned to the faculty member and the Department Chair/Head as a reference for continued annual evaluations.

10. Changes to the IME Policy and Procedures

The IME document describing the PTE policy, criteria and procedures must be modified to comply with State Board of Higher Education, NDSU and/or COE policies, to correct errors, to edit for clarity, to respond to issues that are not well addressed, and to reflect the intent of faculty related to policy and procedures. The IME PTE Committee will make the changes and place those changes into effect with a majority vote of the tenured and probationary IME faculty. The proposed changes are to be shared with faculty at least ten (10) business days prior to voting. A summary of the corrections/edits will be forwarded to COE PTE Committee, COE Dean, and Provost for their approval. Upon approval, faculty will be informed of the changes to the policy. The IME document will be placed on the IME Department Web site by the Department Chair.

Dr. Val Marinov, Professor
Chair, PTE Committee, Industrial & Manufacturing Engineering

Date

Dr. Om Yadav, Professor
Chair (Interim), Industrial & Manufacturing Engineering

Date

Dr. Val Marinov, Professor
Chair, College of Engineering PTE Committee

Date

Dr. Michael Kessler, Professor
Dean, College of Engineering

Date

Dr. Beth Ingram, Professor
Provost

Date