

**CODE OF THE MECHANICAL ENGINEERING DEPARTMENT**  
**Approved by MECH Faculty Vote on 2/6/2025**

**This code complies with university regulations outlined in Section C of the CSU Academic Faculty and Administrative Professional Manual. The reference numbers that appear throughout identify sections in the manual that dictate specific requirements.**

**1. Department Mission (C.2.4.2.1.c)**

The mission of the department is to serve the constituency of the State of Colorado, the nation, and the world through high-quality programs of:

- a. instruction at the undergraduate and graduate levels, preparing students at the Bachelor of Science (BS), Master of Science (MS) / Master of Engineering (ME) and Doctor of Philosophy (PhD) levels to pursue exemplary careers in industry, academia, and other arenas of professional practice,
- b. research and outreach with emphasis on serving the needs of our land-grant constituency with scholarship of discovery, application, integration, and teaching, and
- c. service to our academic and professional community.

**2. Procedures for Amending the Code (C.2.4.2.1.1)**

When any of the following situations occur:

- a. the Department Head initiates the code amendment process,
- b. a majority of the eligible faculty request, in writing to the Department Head, that the code be revised, amended, or otherwise changed, or
- c. the beginning of the Fall semester of a self-evaluation year.

Within two weeks, the Department Head shall provide for the election of a four-member Code Review Committee from the eligible faculty. Although directed to review specific parts of this code, they may propose for adoption changes covering any part of the code, including but not limited to, those points specifically requested. The committee shall present for adoption a revised code which incorporates all proposed modifications. A two-thirds majority of the eligible faculty shall be required for adoption.

Should the faculty approve the revised code, it shall immediately be provided to the Dean and the Provost & Executive Vice President. Upon the Dean's receipt, the Department shall begin to operate in accordance with its procedures, subject to any limitations of the Academic Faculty and Administrative Professional Manual. Copies of the revised and adopted code shall be provided to each faculty member.

**3. Departmental Membership (C.2.4.2)**

Faculty members of the Mechanical Engineering department include Tenure Track / Tenured Faculty, Career Line Faculty, faculty on transitional appointments, affiliate faculty, visiting faculty, and emeritus professors. Tenure Track / Tenured Faculty are 9-month tenure-track Assistant Professors or tenured Associate Professors and Full Professors. Career Line faculty include Assistant Research Professors, Associate Research Professors, Research Professors, Instructors, Senior Instructors, Master Instructors, Assistant Teaching Professors, Associate Teaching Professors, and Teaching Professors.

Eligible faculty members are all Tenure Track / Tenured and Career Line faculty members. Affiliate faculty, visiting faculty, and emeritus professors are not eligible faculty. Each faculty member with an interdepartmental appointment shall be considered a member of the Mechanical Engineering Department only if the faculty member contracts the greater percentage of time in this department.

In the case of a member having equal time in another department, that member must decide in which department representation is desired. The status of such a member shall remain unchanged unless academic appointment changes require a change in departmental representation.

References in this code to faculty members or positions, unless otherwise stated, specifically refer to members of the Mechanical Engineering department.

#### **4. Voting and Elections (C.2.4.2.1.m)**

Only eligible faculty may vote on departmental matters including elections. Unless otherwise specified in this code or the Academic Faculty and Administrative Professional Manual, voting may occur only with a quorum (at least half) of the eligible faculty participating, and simple majorities will carry.

#### **5. Faculty and Staff Meetings of the Department (C.2.4.2.1.j)**

There shall be at least two departmental faculty and staff meetings per academic year, at least one in the Fall semester and at least one in the Spring semester, called by the Department Head, with written notice and principal agenda items given in advance by the Department Head. Attendance is limited to faculty and staff members plus a recording secretary so designated by the Department Head. Visitors and guests authorized by the Department Head prior to the faculty meeting are welcome to attend. Faculty and staff may submit agenda items for the Department Head's consideration.

#### **6. Organizational Framework of the Department**

##### *6.1 Department Head*

The administrative officer of the Mechanical Engineering department shall be designated the Department Head (C.2.4.2.1.a). Duties of the Department Head are those specified in the Academic Faculty and Administrative Professional Manual (C.2.6.2) and in this code. The manner of selection and appointment (C.2.4.2.2.b) and term of office (C.2.4.2.2.c) of the Department Head are governed by the Academic Faculty and Administrative Professional Manual.

##### *6.2 Acting and Interim Department Head*

The Department Head shall appoint an Acting Department Head from the faculty to cover short periods of absence or vacancy. In the case of resignation, termination, leave of absence, sabbatical, or other long-term absence of the Department Head, the Dean of the College of Engineering, in consultation with the departmental faculty, will appoint an Interim Department Head from among the tenured, eligible faculty.

##### *6.3 Associate Department Head for Graduate Programs*

An Associate Department Head for Graduate Programs shall be appointed by the Department Head from the eligible faculty at the rank of Associate Professor (Tenured or Career Line) or higher. The term of office of the Associate Department Head is three years. Before the end of term, the Associate Department Head will step down upon a written request from the Department Head.

##### *6.4 Associate Department Head for Undergraduate Programs*

An Associate Department Head for Undergraduate Programs shall be appointed by the Department Head from the eligible faculty at the rank of Associate Professor (Tenured or Career Line) or higher. The term of office of the Associate Department Head is three years. Along with those duties specified elsewhere in this code, the Associate Department Head shall act as the Department representative on the College Curriculum Committee. Before

the end of term, the Associate Department Head will step down upon written request from the Department Head.

#### 6.5 *Leadership Committee*

The Leadership Committee of the department is composed of, at a minimum, the Department Head and the Associate Heads of Undergraduate and Graduate Programs, The Department Head may also appoint other members of the faculty and/or staff to the Committee. The Leadership Committee shall consider, among other items:

- a. actions on hiring and termination of administrative professionals in accordance with procedures specified in the CSU Academic Faculty and Administrative Professional Manual (D.5.3),
- b. academic year priorities and agenda for the Undergraduate and Graduate Education Committees, and
- c. procedures for periodic evaluation of faculty (described in Section 9.5).

#### 6.6 *Standing Committees*

##### 6.6.1 *Charge to the Standing Committees*

There shall be standing committees of the department, designated by name in the code. The purposes of the standing committees are to develop and recommend policies and positions on academic matters, and to conduct the business of the department. All standing committees may receive appropriate items for consideration from any faculty member. The receipt of each item shall be acknowledged, and its disposition shall be reported to the initiator. All standing committee meetings shall be open to all faculty members.

##### 6.6.2 *Standing Committees: Named*

The following shall be the standing committees of the department: Tenure and Promotion Committee, Career Line Promotion Committee, Faculty and Staff Awards Committee, Graduate Education Committee, Undergraduate Education Committee, Code Review, Scholarships, MEAB Liaisons, and External Relations.

##### 6.6.3 *Standing Committees: Membership and Function*

6.6.3.1 *Tenure and Promotion Committee* – For a Tenure Track / Tenured Faculty candidate seeking tenure and/or promotion, the Tenure and Promotion Committee shall consist of all Tenure Track / Tenured Faculty above the current rank of the candidate. The Department Head will nominate the Chair for the Tenure and Promotion Committee. Professors emeritus may sit on the committee but shall not vote. If the number of voting members is less than five, the Department Head shall appoint other faculty from the College of Engineering of appropriate rank, in accordance with E.10.5.2. The Committee Chair, as necessary, will call meetings of the Tenure and Promotion Committee. The Tenure and Promotion Committee will meet annually and review the progress of all Assistant Professors as it relates to promotion to Associate Professor. In addition, a comprehensive performance review of each Assistant Professor shall be conducted by the midpoint of their probationary period.

*Career Line Promotion Committee* – For a Career Line Faculty candidate seeking promotion, the Promotion Committee shall consist of all Career Line faculty above the current rank of the candidate. The Department Head will nominate the Chair for the Promotion Committee. If the number of voting members is less than five, the

Department Head shall appoint other faculty from the College of Engineering of appropriate rank, in accordance with E.10.5.2. The Committee Chair, as necessary, will call meetings of the Promotion Committee. The Career Line Promotion Committee will meet annually and review the progress of all Instructors, Assistant Teaching Professors, and Assistant Research Professors as it relates to promotion to Senior Instructor, Associate Teaching Professor, and Associate Research Professor. In addition, a comprehensive performance review of each Assistant Professor shall be conducted by the midpoint of their probationary period.

6.6.3.2 *Faculty & Staff Awards Committee* – The Awards Committee shall consist of at least three faculty and staff members selected by the Department Head. The function of this committee is to prepare and deliver, where and when appropriate, nominations and recommendations for professional and academic awards and recognition for the faculty and staff.

6.6.3.3 *Graduate Education Committee* – The Graduate Education Committee shall consist of Tenure Track / Tenured Faculty members selected by the Department Head to represent the research areas of the department. It is chaired by the Associate Department Head for Graduate Programs, who, in consultation with the Department Head, will set the priorities and agenda for the committee. This committee shall deal with academic issues including but not limited to:

- a. graduate course matters, graduate recruitment, retention, and advising issues, and
- b. graduate program of study and examination procedures.

The Associate Department Head for Graduate Programs shall select and recruit graduate teaching assistants (GTAs) for all departmental courses having GTA allocations. The Associate Department Head will do so in consultation with each faculty member teaching a course having a GTA allocation, to ensure high quality instruction while also serving the interests of the graduate program.

6.6.3.4 *Undergraduate Education Committee* – The Undergraduate Committee shall consist of the Associate Department Head for Undergraduate Programs as Chair, the Manager of Undergraduate Programs, and Working Group Chairs. The Committee will be assembled by the Department Head when needed to support new programs or concentrations, or curriculum changes are contemplated. The Chair will set the priorities and agenda for the committee. This committee shall:

- a. oversee undergraduate curriculum matters, including program revision and creation, course additions, modifications, and deletions, while ensuring alignment with ABET accreditation standards, and
- b. propose updates to maintain academic relevance.

6.6.3.2 *Other Standing Committees* include Code Review, Scholarships, MEAB Liaisons, and External Relations.

#### 6.6.4 *Ad-hoc Committees*

The Department Head may form or abolish committees to carry out the functions and achieve the goals of the department. Unless otherwise specified, the Department Head is a non-voting *ex officio* member of all ad-hoc departmental committees. The ABET Accreditation Committee is an example of an ad-hoc committee.

## 7. Self-Evaluation of the Department (C.2.4.2.1.h)

Operational policies governing a self-evaluation are outlined in the Academic Faculty and Administrative Professional Manual (C.2.4.2.2.d) and apply under the following circumstances:

- a. the provost requests an evaluation,
- b. at least one-half (but not less than three members) of the eligible faculty sign a written request for a self- evaluation and send the request to the Dean, or
- c. the Department Head sends a written request for a self-evaluation to the Dean.

Within two weeks, the Department Head shall provide for the election of a three-member Self-Evaluation Committee from the eligible faculty. Neither the Department Head nor either of the Associate Department Heads is eligible for membership on this committee. The nature, goals, and mechanics of execution of self-evaluation shall be at the discretion of the committee. The committee is to review department operations including but not limited to the following:

- a. undergraduate and graduate teaching and learning, including progress toward ABET accreditation,
- b. progress of the department's current strategic plan, and
- c. the department code.

The committee shall consolidate all its findings and recommendations into a written report, within sixteen weeks after formation of the committee, or in accordance with the Provost & Executive Vice President's schedule. This report shall be submitted to the eligible faculty. A minority report may be submitted. When approved by a vote of the faculty, the report shall be submitted to the Department Head, Dean, and the Provost & Executive Vice President.

## 8. Procedures by which students may appeal academic decisions of their instructors (C.2.4.2.1.i & I.7)

### 8.1 *Bases for appeal of academic decisions*

Per the Academic Faculty and Administrative Professional Manual, paragraph I.7, students may appeal academic decisions.

### 8.2 *Procedures for appeal of academic decisions*

8.2.1 *Discuss with Faculty* – Before making an appeal, the student must discuss the situation with the faculty member(s) involved in the decision.

8.2.2 *Formal Appeal* – If a satisfactory resolution is not reached, the student may appeal the decision by submitting a written request to the Associate Department Head for Undergraduate Programs who will serve as the Appeal Coordinator. In the event the instructor involved in the appeal is the Associate Department Head, the Department Head will serve as the Appeal Coordinator.

8.2.3 *Committee Review* – If a satisfactory resolution is not reached, the Department Head will appoint an Appeals Committee within 30 calendar days of receipt of the appeal.

## 9. Personnel Policies of the Department

### 9.1 *Policies for Tenure Track Faculty (C.2.4.2.1.e)*

Tenure Track Faculty are typically assigned 50% research, 40% teaching, and 10% service effort distribution. These efforts may be adjusted and negotiated with the Department Head. Tenure Track Faculty are expected to teach three 3-credit courses per academic year or 9-cr equivalent, and to teach assigned classes in accordance with official course description, designed modality, and curricular goals. At the discretion of the Department Head, the distribution of this teaching

load may be adjusted.

### 9.1.1 *Tenure Track Faculty Titles Defined*

#### *Assistant Professor.*

Requirements: PhD in mechanical engineering or closely related discipline. This is a teaching and research appointment at  $\geq 0.50$  FTE. Assistant Professors are eligible as defined in section 3.

Rights and responsibilities: Assistant Professors are expected to demonstrate excellence in research, and to develop an independent research program with documented grant support as Principal Investigator and a strong record of archival publications and scholarly products (e.g., patents) as the senior author in their research field. They are also expected to demonstrate professional development in teaching and engineering education. They should start to build a reputation for excellence in teaching methods. They are expected to have a substantial positive impact on the development of students in the classroom and should begin to engage the students in other activities such as faculty mentorship of student groups. Assistant Professors can serve as the major research advisor for graduate students pursuing a Master of Science or Doctor of Philosophy degree as well as serve on Master of Science thesis or Doctor of Philosophy dissertation committees.

#### *Associate Professor.*

Requirements: PhD in mechanical engineering or closely related discipline and five (5) years of experience as an Assistant Professor (or equivalent). Given superior performance, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a teaching and research appointment at  $\geq 0.50$  FTE. Associate Professors are eligible as defined in section 3.

Rights and responsibilities: Associate Professors are expected to continue their high-quality research activities and establish an international reputation as leaders in their chosen fields. They should show promise of becoming a leader in their research discipline as evidenced by invited lectures, seminars, and workshops, peer-reviewed publications in conferences and journals, scholarly products, development of a research funding base, support from leaders in their research field, and active participation in professional societies. Other evidence of the impact of their scholarship on society might include patents, successful technology transfer projects, the impact of their research on governmental policies, and industrial processes. They should have a track record of Master of Science thesis students who have graduated, and/or have Doctor of Philosophy advisees who have graduated or at least have passed proposal exams and are near graduation. In addition to the duties of an Assistant Professor, an Associate Professor is expected to demonstrate excellence in teaching and engineering education, including involvement in content creation, and providing substantial input/direction with respect to the mechanical engineering undergraduate and graduate program. They need to be effective and able teachers at both the undergraduate and graduate level as evidenced by strong teaching evaluations and recommendations from students and peers. They are expected to have a substantial positive impact on the development of students both in the classroom and in activities that promote student development, such as faculty mentorship of student groups. Finally, they are expected to make contributions through service activities to the department, college, university, and their professional societies through committee memberships, chairing professional society sessions, K-12 outreach projects, proposal and manuscript review, etc. Associate Professors can serve as the major research advisor for graduate students pursuing a Master of Science or Doctor of Philosophy degree as well as serve on Master of Science thesis or Doctor of Philosophy dissertation committees.

*Professor.*

Requirements: PhD in mechanical engineering or closely related discipline and five (5) years of experience as an Associate Professor (or equivalent). Given superior performance, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a teaching and research appointment at  $\geq 0.50$  FTE. Professors are eligible as defined in section 3.

Rights and responsibilities: Professors are expected to continue their high-quality research activities and establish an international reputation as a leader in their chosen field. They should demonstrate world-class excellence in research and scholarship, have significant scholarly publications and original professional contributions as measured by publications in leading journals, invited lectures, seminars, and workshops, and conference publications, and recognition by external peers. They should be able to sustain a strong externally sponsored research program. Other evidence of the impact of their scholarship on society might include patents, successful technology transfer projects, the impact of their research on governmental policies, and industrial processes. They should demonstrate achievement in advising through student advising evaluations, completed Masters and Doctor of Philosophy students, and successful placement of these students in professional positions. They should demonstrate achievement in engineering education as measured by supportive teaching evaluations by students and peers, development of new courses, and innovative approaches to student learning. They should demonstrate achievement in service/outreach through department, college, and university committee service, leadership with program development and administration, professional society service, and scholarly journal/review panel service. Full Professors can serve as the major research advisor for graduate students pursuing a Master of Science or Doctor of Philosophy degree as well as serve on Master of Science thesis or Doctor of Philosophy dissertation committees.

*9.1.2 Tenure Track Faculty Tenure and Promotion*

Academic Faculty and Administrative Professional Manual, paragraphs E.10.5 and E.13 describe the procedures for Granting of Tenure and the processes for Advancement in Rank (Promotion).

The Department Head shall initiate recommendations for tenure and/or promotion, at the minimum, at the start of the Fall semester preceding the expected decision. The Department Head shall convene the Tenure and Promotion committee. The committee shall examine the credentials and dossier of the member and shall vote to grant or deny tenure and/or promotion. A recommendation shall be a simple majority vote. The recommendation shall include a vote summary and a statement of reasons representing the majority and minority points of view (E.10.5.1). The Chair shall, within one week, deliver the written recommendation to the Department Head and it shall be provided to the faculty member. Academic Faculty and Administrative Professional Manual, paragraphs E.10.5.3 and E.10.5.4 describe the process to be followed in the event of a vote to deny tenure and paragraphs E.13.3 and E.13.4 describe the process to be followed in the event of a vote to deny promotion. After the recommendation is received, a contrary decision may be issued by the Department Head only for compelling reasons that shall be stated in writing to the faculty member, the tenure and promotion committee, and the Dean of the WSCOE. If a contrary decision is issued, the faculty member and the tenure and promotion committee shall be given seven (7) working days from the date of notification of the contrary recommendation to respond in writing to the Department Head's reasons for opposition. The Department Head's written contrary decision, the faculty member's written response, and the tenure and promotion committee's written response will be forwarded to the

WSCOE Dean for further consideration.

### 9.1.3 *Promotion Dossier for Tenure Track / Tenured Faculty*

The promotion dossier must contain all documents and information that are required by the Office of the Provost & Executive Vice President and Walter Scott, Jr. College of Engineering, as outlined in Interfolio. Additionally, the Department of Mechanical Engineering requires the following for a complete promotion dossier:

- Within the promotion dossier, where the publications and presentation are listed, the candidate must indicate co-authors or co-presenters who are advisees or students within their laboratory with an octothorpe (#).
- All Tenure Track faculty who have, or have had since their prior promotion, a teaching component in their effort allocation include evidence of teaching effectiveness in a dossier appendix entitled "Evidence of Teaching Effectiveness". Refer to Section 9.7 for specific requirements.

## 9.2 *Policies for Career Line Teaching Faculty*

Career Line Teaching Faculty are typically assigned 90% teaching and 10% service effort distribution. These efforts may be adjusted and negotiated with the Department Head. Career Line Teaching Faculty are expected to teach six 3-credit courses per academic year or 18-cr equivalent, and to teach assigned classes in accordance with official course description, designed modality and curricular goals. At the discretion of the Department Head, the distribution of this teaching load may be adjusted.

Adjunct Faculty are typically employed on a temporary basis. This appointment type may not be used for a faculty member employed full-time or part-time every semester for more than two (2) semesters. The faculty member will participate in annual reviews and the annual salary exercise.

### 9.2.1 *Career Line Teaching Faculty Titles Defined*

#### *Instructor.*

Requirements: MS in mechanical engineering or closely related discipline. This is a teaching appointment at  $\geq 0.50$  FTE. Instructors are eligible as defined in Section 3.

Rights and responsibilities: Instructors are expected to demonstrate professional development in teaching and engineering education. They are expected to have a substantial positive impact on the development of students in the classroom and should begin to engage the students in other activities such as faculty mentorship of student groups. It is also expected that Instructors will be regularly engaged in professional development activities such as engineering education research and have the right to negotiate course buyout with the Department Head to support such work. The Instructor should start to build a larger scale reputation for excellence in teaching methods.

#### *Senior Instructor.*

Requirements: MS in mechanical engineering or closely related discipline and five (5) years of academic or industrial experience as an Instructor (or equivalent position providing such experience). Given superior performance, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a teaching appointment at  $\geq 0.50$  FTE. Instructors are eligible as defined in Section 3 and are supported on a continuing appointment. At the Department Head's discretion, the continuing appointment may be converted into a contract upon promotion to, or after one year of service at CSU at, this rank.



Rights and responsibilities: In addition to the duties of an Instructor, a Senior Instructor is expected to demonstrate excellence in teaching and engineering education, including involvement in content creation, and providing substantial input/direction with respect to the mechanical engineering undergraduate program. They are expected to have a substantial positive impact on the development of students both in the classroom and in activities that promote student development, such as mentorship of student groups. These instructors may participate in professional development activities, including but not limited to research, and have the right to negotiate course buy-out with the Department Head to support such work. Senior Instructors may also engage in mentoring of Instructors and Assistant Teaching Professors and should demonstrate active participation in professional societies. With approval by a majority vote by the Graduate Education Committee, Senior Instructors may sit on graduate student committees and serve as a co-advisor on Master of Science thesis committees, with an Associate Research Professor, Research Professor, or tenured/tenure-track faculty member serving as the major advisor.

*Master Instructor.*

Requirements: MS in mechanical engineering or closely related discipline and five (5) years of academic or industrial experience as a Senior Instructor (or equivalent position providing such experience). Given superior performance, the Department Head can initiate a promotion review before the 5 years of experience is met. Promotion into this rank requires one to have a nationally recognized impact in engineering education. This is a teaching appointment at  $\geq 0.50$  FTE. Master Instructors are eligible as defined in Section 3 and are supported on a continuing appointment. At the Department Head's discretion, the continuing appointment may be converted into a contract upon promotion to, or after one year of service at CSU at, this rank. Promotion into this rank requires one to demonstrate excellence in teaching and service in the mechanical engineering department. This may be achieved by exercising best practices in teaching, such as textbook authorship and publication or developing/providing significant online content, having leading roles in conferences and/or editorial responsibilities, and participating in outreach programs.

Rights and responsibilities: In addition to the duties of a Senior Instructor, one is expected to provide academic and pedagogical leadership to the department, college, and/or university, and to engineering education or other professional societies. These faculty may participate in professional development activities, including but not limited to, research and they have the right to negotiate course buyout with the Department Head to support such work. A Master Instructor should have a documented track record of successful mentoring of Instructors, Senior Instructors, Assistant Teaching Professors, or Associate Teaching Professors. With approval by a majority vote by the Graduate Education Committee, Master Instructors may sit on graduate student committees and serve as a co-advisor on Master of Science thesis committees, with an Associate Research Professor, Research Professor, or tenured/tenure-track faculty member serving as the major advisor.

*Assistant Teaching Professor.*

Requirements: PhD in mechanical engineering or closely related discipline. This is a teaching appointment at  $\geq 0.50$  FTE. Assistant Teaching Professors are eligible as defined in Section 3.

Rights and responsibilities: An Assistant Teaching Professor is expected to demonstrate professional development in teaching and engineering education. They are expected to have a substantial positive impact on the development of students in the classroom and should begin to engage the students in other activities such as faculty mentorship of student groups. It is also expected that Assistant Teaching Professors will be regularly engaged in professional development activities such as engineering education research and have the

right to negotiate course buy-out with the Department Head to support such work. The Assistant Teaching Professor should start to build a larger scale reputation for excellence in teaching methods. With approval by a majority vote by the Graduate Education Committee, Assistant Professors of Practice may sit on graduate student committees and serve on Master of Science thesis and Doctor of Philosophy dissertation committees, with an Associate Research Professor, Research Professor, or tenured/tenure-track faculty member serving as the major advisor.

*Associate Teaching Professor.*

Requirements: PhD in mechanical engineering or closely related discipline and five (5) years of experience as an Assistant Professor of Practice (or equivalent). Given superior performance, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a teaching appointment at  $\geq 0.50$  FTE. Associate Teaching Professors are eligible as defined in Section 3 and are supported on a continuing appointment. At the Department Head's discretion, the continuing appointment may be converted into a contract upon promotion to, or after one year of service at CSU at, this rank. Promotion into this rank requires excellence in teaching and service within the mechanical engineering department, demonstrating potential for leadership. A commitment to best practices in teaching must be evident and supported by positive evaluations from students and peers. Innovative approaches to student learning, such as developing new courses or methodologies, are essential. Service to the department includes activities such as advising and mentoring students in senior design projects, participation in department or college committees, and engagement with industry further enhance qualifications. Scholarly achievements, including authoring textbooks, publishing educational materials, or creating substantial online resources, provide additional support for promotion. Engagement in conferences, editorial roles, outreach initiatives, or other professional activities that advance the engineering field is also valued.

Rights and responsibilities: In addition to the duties of an Assistant Teaching Professor, an Associate Teaching Professor is expected to demonstrate excellence in teaching and engineering education, including involvement in content creation, and providing substantial input/direction with respect to the mechanical engineering undergraduate program. They are expected to have a substantial positive impact on the development of students both in the classroom and in activities that promote student development, such as faculty mentorship of student groups. These faculty may participate in professional development activities, including but not limited to research, and have the right to negotiate course buy-out with the Department Head to support such work. Associate Teaching Professors may also engage in mentoring of Assistant Professors and Assistant Teaching Professors, and should demonstrate active participation in professional societies. With approval by a majority vote by the Graduate Education Committee, Associate Professors of Practice may sit on graduate student committees and serve as a co-major advisor/chair on Master of Science thesis and Doctor of Philosophy dissertation committees, with an Associate Research Professor, Research Professor, or tenured/tenure-track faculty member serving as the major advisor.

*Teaching Professor.*

Requirements: PhD in mechanical engineering or closely related discipline and five (5) years of experience as an Associate Teaching Professor (or equivalent). Given superior performance, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a teaching term appointment at  $\geq 0.50$  FTE. Teaching Professors are eligible as defined in Section 3 and are supported on a continuing appointment. At the Department Head's discretion, the continuing appointment may be converted into a

contract upon promotion to, or after one year of service at CSU at, this rank. Promotion into this rank requires a sustained record of excellence in teaching and service, reflecting long-term leadership and impact within the mechanical engineering department. Consistent application of best practices in teaching, as evidenced by positive evaluations from students and peers, and demonstrated commitment to advancing student learning, through innovative courses and teaching strategies, are essential. Service at this level must include significant contributions, such as ongoing mentorship of students in senior design projects, honors theses, and independent study efforts, and development of student organizations and academic programs. Leadership roles in department or college committees and/or strong engagement with industry are expected. Scholarly achievements, including authoring textbooks, producing impactful educational resources, or contributing to professional development through editorial leadership and conference participation, are valued for this rank. Recognition for leadership in outreach programs and other activities that advance the engineering profession further support promotion.

Rights and responsibilities: Teaching Professors are expected to provide academic and pedagogical, as well as professional engineering leadership to the department, college, and university demonstrated through intramural or extramural activities. Examples of such may include active promotion of advancements in engineering education, advocacy of engineering professional societies, participation in engineering industrial consortia or other endeavors furthering the engineering profession. Additionally, Teaching Professors are encouraged to participate in professional development activities, including but not limited to, pursuing professional development certificates and licensure, consulting, and research. They have the right to negotiate course buy-out with the Department Head to support such work. A Teaching Professor should maintain a documented track record of successful mentoring of Assistant Professors, Associate Professors, Assistant Teaching Professors, or Associate Teaching Professors. With approval by a majority vote by the Graduate Education Committee, Professors of Practice may sit on graduate student committees and serve as a co-major advisor/chair on Master of Science thesis and Doctor of Philosophy dissertation committees, with an Associate Research Professor, Research Professor, or tenured or tenure-track faculty serving as the major advisor.

### *9.2.2 Career Line Teaching Faculty Promotion*

Academic Faculty and Administrative Professional Manual, paragraph E.13 describes the processes for Advancement in Rank (Promotion).

Normally, after five (5) years in rank, faculty are eligible to be considered for promotion. If the promotion is approved, it shall become effective the following July 1. Promotion may be considered prior to five (5) years in rank in those cases in which the faculty member's performance clearly exceeds the standards for promotion (as outlined below) and/or when candidate's initial faculty appointment included a service credit toward promotion. The Department Head shall initiate recommendations for promotion of Career Line Teaching Faculty by the start of the fall semester preceding the expected decision. The Department Head shall convene the Career Line Promotion Committee.

A promotion dossier documenting the fulfilment of requirements for the desired title (e.g., academic degree) and excellence in all assigned duties at current title will be evaluated by the Career Line Promotion Committee. The committee will review the dossier and any other pertinent information. The committee shall consider three (3) evaluation criteria, with the weight of each of these criteria being commensurate with the faculty member's effort distribution: 1) teaching excellence; 2) professional, scholarly activity, and/or creativity; and 3) intramural and extramural service. A promotion recommendation shall be by a majority

vote of the promotion committee. The recommendation shall include a vote summary and a statement representing the majority and minority points of view. The committee chair shall, within two weeks, deliver the written recommendation to the Department Head and it shall be provided to the faculty member. Academic Faculty and Administrative Professional Manual, paragraphs E.13.3 and E.13.4 describe the process to be followed in the event of a vote to deny promotion. After the recommendation is received, a contrary decision may be issued by the Department Head only for compelling reasons that shall be stated in writing to the faculty member, the promotion committee, and the Dean of the WSCOE. If a contrary decision is issued, the faculty member and the promotion committee shall be given seven (7) working days from the date of notification of the contrary recommendation to respond in writing to the Department Head's reasons for opposition. The Department Head's written contrary decision, the faculty member's written response, and the promotion committee's written response will be forwarded to the WSCOE Dean for further consideration.

### *9.2.3 Promotion Dossier for Career Line Teaching Faculty*

The promotion dossier is intended to be a set of documents that highlights and provides definitive evidence of teaching effectiveness, as well as the impact that the candidate has had on the undergraduate education mission of the department. The promotion dossier should be the primary source of evidence used by the Career Line Promotion Committee when evaluating the candidate.

The promotion dossier must contain all documents and information that are required by the Provost & Executive Vice President and Walter Scott, Jr. College of Engineering, as outlined in Interfolio. Additionally, the Department of Mechanical Engineering requires that all Career Line faculty that have, or have had, a teaching component in their effort allocation include evidence of teaching effectiveness in a dossier appendix entitled "Evidence of Teaching Effectiveness". Refer to Section 9.7 for specific requirements.

## *9.3 Policies for Career Line Research Faculty*

Career Line Research Faculty are typically assigned 90% research and 10% service effort distribution. These efforts may be adjusted and negotiated with the Department Head. Career Line Research Faculty are typically not expected to teach.

### *9.3.1 Career Line Research Faculty Titles Defined*

#### *Assistant Research Professor.*

Requirements: PhD in mechanical engineering or closely related discipline. This is a research appointment at  $\geq 0.50$  FTE. Assistant Research Professors are eligible as defined in Section 3.

Rights and responsibilities: Assistant Research Professors are expected to demonstrate excellence in research, develop an interdependent research program with documented grant support as the Principal Investigator and a strong record of archival publications as the senior author in their research field. Assistant Research Professors may sit on graduate student committees (MS and PhD), serve as the major advisor/chair on Master of Science thesis committees, and, with a majority vote by the Graduate Education Committee, serve as the major advisor/chair on Doctor of Philosophy dissertation committees with an Associate Research Professor, Research Professor, or tenured or tenure-track faculty member serving as the co-advisor.

*Associate Research Professor.*

Requirements: PhD in mechanical engineering or closely related discipline and five (5) years of experience as an Assistant Research Professor (or equivalent). Given superior performance, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a research appointment at  $\geq 0.50$  FTE. Associate Research Professors are eligible as defined in Section 3 and are supported on a continuing appointment.

Rights and responsibilities: Associate Research Professors are expected to continue their high-quality research activities and establish an international reputation as leaders in their chosen fields. Associate Research Professors may sit on graduate student committees (MS and PhD) and serve as the major advisor/chair on Master of Science thesis committees and Doctor of Philosophy dissertation committees.

*Research Professor.*

Requirements: PhD in mechanical engineering or closely related discipline and five (5) years of experience as an Associate Research Professor (or equivalent). Given superior performance, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a research appointment at  $\geq 0.50$  FTE. Research Professors are eligible as defined in Section 3 and are supported on a continuing appointment. Promotion to the rank of Research Professor requires that the candidate has developed an independent research program with documented grant support as the Principal Investigator, a strong record of archival publication as the senior author in their research field and have established an international reputation as a leader in their field of interest.

Rights and responsibilities: Research Professors are expected to continue their high-quality research activities and build upon their reputation as international leaders in their chosen fields. Research Professors may sit on graduate student committees (MS and PhD) and serve as the major advisor/chair on Master of Science thesis committees and Doctor of Philosophy dissertation committees.

*9.3.2 Career Line Research Faculty Promotion*

Academic Faculty and Administrative Professional Manual, paragraph E.13 describes the processes for Advancement in Rank (Promotion).

Normally, after five (5) years in rank, faculty are eligible to be considered for promotion. If the promotion is approved, it shall become effective the following July 1. Promotion may be considered prior to five (5) years in rank in those cases in which the faculty member's performance clearly exceeds the standards for promotion (as outlined below). The Department Head shall initiate recommendations for promotion of Career Line Research Faculty by the start of the fall semester preceding the expected decision. The Department Head shall convene the Career Line Faculty Promotion Committee.

A promotion dossier documenting the fulfillment of requirements for the desired title (e.g., academic degree) and excellence in all assigned duties at current title will be evaluated by the Career Line Promotion Committee. The committee will review the dossier and any other pertinent information. The committee shall consider three (3) evaluation criteria, with the weight of each of these criteria being commensurate with the faculty member's effort distribution: 1) research and scholarly accomplishments; 2) intramural and extramural service; and 3) teaching and mentorship. A promotion recommendation shall be by a majority vote of the promotion committee. The recommendation shall include a vote summary and a statement representing the majority and minority points of view. The committee chair shall, within two weeks, deliver the written recommendation to the

Department Head and it shall be provided to the faculty member. Academic Faculty and Administrative Professional Manual, paragraphs E.13.3 and E.13.4 describe the process to be followed in the event of a vote to deny promotion. After the recommendation is received, a contrary decision may be issued by the Department Head only for compelling reasons that shall be stated in writing to the faculty member, the promotion committee, and the Dean of the Walter Scott Jr, College of Engineering (WSCOEO). If a contrary decision is issued, the faculty member and the promotion committee shall be given seven (7) working days from the date of notification of the contrary recommendation to respond in writing to the Department Head's reasons for opposition. The Department Head's written contrary decision, and the faculty member's and promotion committee's written response, will be forwarded to the WSCOEO Dean for a further consideration.

### 9.3.3 *Promotion Dossier for Career Line Research Faculty*

The promotion dossier must contain all documents and information that are required by the Provost & Executive Vice President and Walter Scott, Jr. College of Engineering, as outlined in Interfolio. Within the promotion dossier, where the publications and presentation are listed, the candidate must indicate co-authors or co-presenters who are advisees or students within their laboratory with an octothorpe (#).

- The completed promotion dossier must include an appendix entitled "Evidence of Research Impact" that includes:
  - Narrative statement of research programs and overall research goals,
  - Narrative statement on research impact and self-evaluation of research effectiveness,
  - Supervisor and/or funding agency or program sponsor feedback on research programs, and
  - Review of the promotion dossier from Research Faculty who are external to CSU.

In addition to the materials listed above, the promotion dossier may include, as appendices, other supporting documents that highlight teaching, scholarship, and service impact. These documents may include:

#### Scholarship

- Seminars or lectures given at other institutions or professional societies,
- Research/scholarship in engineering education or technical areas (journal publications, abstracts, posters, books, citation metrics, etc.), and
- Evidence of continued professional development.

#### Research and Scholarly Accomplishments

The focus of the assessment of Research Faculty members should be on research contributions and impact, which should be assessed using essentially the same measurements and standards used to assess the research accomplishments of tenure-track faculty of similar rank. The Career Line Faculty member is expected to contribute significantly and distinctly to the development and dissemination of new knowledge through research and publication of research results. The following will be considered in evaluating a candidate's research and scholarship according to accepted publishing patterns in the candidate's own research area:

- Research grants and contracts obtained, and associated research expenditures due to the candidate's independent research program. Special emphasis should be given to extramural funding obtained by the candidate,
- Publication of original research papers in refereed technical journals and conference proceedings. The prestige of the journals and conferences and the quality number

of publications will be considered. Publications in which the candidate serves as the primary and/or senior author will be given more emphasis,

- Presentations at conferences, workshops, colloquia or seminars. Keynote, plenary and invited talks will be noted,
- Serving as the main advisor for MS and PhD students,
- U.S. or international patents obtained for work performed as a Research Faculty member,
- Publication of research monographs, book chapters, and book reviews,
- Impact of consulting related to candidate's engineering expertise,
- Entrepreneurial, technology translation or research commercialization efforts,
- Federal (i.e., SBIR), venture or other research funding obtained supporting the entrepreneurial, technology translation or commercialization efforts, and
- Other evidence that demonstrates the impact of the candidate's scholarly work.

### Service

Research Faculty members are expected to perform the types of professional service typical of active researchers. Research-related service, such as recruiting graduate students, serving on graduate students' advisory committees, serving on a graduate committee, or any other research-related departmental, college or university activity is an essential component of a Research Faculty member's duties.

External professional service is also important and should be included in the assessment.

Typical internal and external service may include:

- Evidence of service to the department, college, or university (committees, etc.),
- Evidence of service to student instruction and community development (mentoring clubs, senior design teams, participation on thesis / dissertation committees etc.),
- Evidence of departmental leadership,
- Participation and/or leadership in professional and academic organizations, and
- Letters of support attesting to the candidate's contributions to service-related activities (can be internal or external to CSU, including industry representatives and former students).

### Teaching

Research faculty members are not typically expected to provide classroom instruction. In cases where a Research Faculty member teaches a class, this contribution should be considered and assessed. Research faculty who are, or have been, engaged in teaching activities shall include evidence of teaching effectiveness in a dossier appendix entitled "Evidence of Teaching Effectiveness". Refer to Section 9.7 for specific requirements.

#### 9.4 *Faculty Hiring (C.2.4.2.1.d)*

When a faculty position becomes vacant, or when a new faculty position becomes available, the Department Head will appoint an ad-hoc Search Committee to advertise the position, evaluate candidate applications, and offer recommendations for hiring. This search process is only limited to Tenure Track / Tenured Faculty and Career Line Teaching Faculty and does not apply to the hiring of other faculty (e.g., Career Line Research Faculty). The committee shall consist of at least two eligible faculty members, in addition to the Chair, who is appointed by the Department Head. The Chair must have taken Search Chair Training and all committee members must have completed the Search Committee Member Training.

#### 9.5 *Procedures for conducting annual and periodic comprehensive reviews of the performance of faculty members (C.2.4.2.1.g, C.2.5.a, and E.14)*

All faculty members will prepare and submit at least one week in advance of the annual review meeting the following documents to support their Faculty Annual Calendar Year Performance Review with the Department Head:

- a. Updated Interfolio
- b. Updated Curriculum Vitae (CV)
- c. Faculty Activity Report (FAR) Summary
- d. Faculty Self-Evaluation
- e. Prior calendar year Peer Teaching and Student Course Evaluations
- f. Evidence of Teaching Effectiveness. All Instructors, Assistant Professors, and other faculty as prescribed by the Department Head shall include an appendix entitled "Evidence of Teaching Effectiveness", as described in Section 9.7, in their annual review documentation.
- g. DE&I Reflection Document

Progress Toward Promotion Reviews of all Instructors and Assistant Professors will be conducted annually by the Department Promotion and Tenure Committees. Comprehensive Mid-Point Reviews of all Assistant Professors will be conducted by the Department Promotion and Tenure Committees and Department Head approximately midway between the Assistant Professor appointment and the expected date of application for promotion to Associate Professor. For Progress Toward Promotion Review and Comprehensive Mid-Point Reviews, a complete draft dossier (as outlined in Section 9.1.3, 9.2.2, or 9.3.2) must be submitted to the appropriate department Promotion Committee for review. Additionally, for Tenure Track Assistant Professors and Assistant Research Professors, an appendix outlining the contracts and grants the candidate has applied for over the past year must be included. The title of the proposal, date submitted, role, PI / Co-PIs (if any), agency, and award amount should be detailed.

Comprehensive Reviews of all Professors will be conducted by the Department Head every 5 years after the Professor appointment. Comprehensive Reviews of all Associate Professors, who are not on track to petition for promotion to Professor after 5 years, will also be conducted by the Department Head every 5 years after the Associate Professor appointment.

Faculty may respond in writing to performance evaluations.

#### 9.6 *Faculty Assignments and Workload*

Faculty members are expected to make contributions in all areas of the land-grant heritage including research, service, teaching, and outreach. Factors that shall be considered in arriving at and evaluating a faculty's workload include:

- Teaching assignment (number of courses taught in a semester, number of class contact hours, number of students in each class, level and nature of a course, number of times the instructor has taught the course),
- Committee assignments
- Research activities,
- Outreach activities,
- Number of graduate advisees,
- Student chapter advising,
- Professional and honor society activity.

#### 9.7 *Evidence of Teaching Effectiveness*

Faculty as required in Sections 9.1.3, 9.2.3 and 9.3.3 above shall include evidence of the following four elements of teaching effectiveness in a dossier appendix entitled "Evidence of



## Teaching Effectiveness”.

The four key elements of teaching effectiveness include:

- a. Creating a positive, inclusive learning environment that encourages student participation, fosters intellectual curiosity, and motivates and supports students both inside and outside the classroom.
- b. Creating well-organized and engaging lessons that emphasize active learning and align with objectives, expectations, and outcomes.
- c. Possessing effective communication/teaching skills with the ability to communicate complex ideas effectively.
- d. Providing regular and constructive student assessment and feedback that motivates and engages students.

The dossier appendix entitled “Evidence of Teaching Effectiveness” must include:

- a. A narrative statement of teaching goals and philosophy.
- b. A narrative statement on teaching impact and self-evaluation of teaching effectiveness.
- c. A teaching matrix outlining courses taught, enrollment in courses, and when significant course revisions were performed with a brief description of changes made.
- d. All student course evaluations from the most recent two years, for every semester and every section taught at CSU, including a personal assessment of the student course evaluations.
- e. All peer evaluations (if available in promotions from associate to full professor), including a personal assessment of the peer evaluations.
- f. All previous annual reviews by both the Department Head and the Promotional Committee, including a narrative statement describing how the candidate has addressed previously identified weaknesses.

The dossier appendix entitled Evidence of Teaching Effectiveness may also include:

- a. Documentation of professional development courses related to teaching such as a certificate of completion.
- b. Detailed curricular revisions and program development information.
- c. Evidence of integration of critical thinking activities into courses.
- d. Evidence of effective technology use in teaching and learning.
- e. Evidence of innovations in courses such as improvements on past practices or efforts to incorporate new knowledge and processes within the discipline.
- f. Relevant course materials such as syllabi, sample assignments, graded assignments, lessons, and assessments with a brief description of how and why they provide evidence of teaching effectiveness.
- g. Student work samples such as student assignments.
- h. Honors and awards related specifically to teaching.
- i. Intramural and extramural communication that recognize teaching excellence.
- j. Seminars or lectures given at other institutions or professional societies, especially relating to teaching.
- k. Research or scholarship in engineering education or technical areas including journal publications, conference abstracts and presentations, posters, books, and citation metrics.
- l. Evidence of continued professional development related to teaching.
- m. Evidence of teaching-related service to the department, college, or university such as committee service or administration of a teaching program or learning center.
- n. Evidence of service to student instruction and community development such as mentoring clubs, senior design teams, and participation on thesis and dissertation committees.
- o. Evidence of departmental leadership as it relates to teaching.
- p. Participation or leadership in external professional organizations, especially related to

education.

## **10. Faculty Mentoring Program**

The department has an obligation to support and facilitate faculty successes. A mentoring committee is required for all assistant professors and instructors – career line or tenure track – and is optional for associate or full professors, or as prescribed by the Department Head. A mentoring committee is characterized by a sensible matching process, realistic expectations with timelines, allocation of time for mentoring meetings, and a written agreement that provides a path to success that includes a personal Academic Development Plan.

### *10.1 Mentoring Responsibilities*

Mentee responsibilities: identify needs and seek out support, assume responsibility for career development, actively maintain the mentoring relationship, schedule regular meetings – at least once a semester, provide feedback to the program for improvement, and give feedback to department head in case there needs to be a change.

Mentor responsibilities: guide mentee on their own path towards a successful academic career, help navigate university policies, provide at least one peer teaching evaluation per semester, provide guidance on goals in the mentee's Teaching Effectiveness Framework, solicit feedback from mentee, introduce mentee to key resources such as career development awards, and provide support and encouragement.

### *10.2 Mentoring Committee Process*

The mentee should pick a primary mentor that they like, trust, admire, and may want to emulate. Then, the primary mentor and mentee will develop the committee with two other members – one of which maybe external to the department and/or CSU. The mentee will then draft a Personal Academic Development Plan that includes short and long-term career goals. This Personal Academic Development Plan should be regularly updated based upon committee meeting feedback. Mentoring activities will be used in the annual evaluation process of both mentee mentor.

### *10.3 New Faculty Mentoring Committee Timeline*

- a. 0-3 months in rank: mentee observes their senior peers and gets to know them. Mentees are encouraged to socialize with these peers to have informal conversations.
- b. 3-4 months in rank: mentee selects their primary mentor and formalizes the relationship. Mentees work with their primary mentor to establish the remaining mentoring committee. The mentoring committee is submitted to the Department Head and Tenure and Promotion Committee chair.
- c. 4 months in rank: if a primary mentor has not been established by this time, the Department Head will assign one by working in consultation with the chair of the Tenure and Promotion Committee.
- d. 4-6 months in rank: a formal Personal Academic Development Plan should be drafted, iterated with the mentoring committee, and submitted to the Department Head and the chair of the Tenure and Promotion Committee.

## **11. Procedures for Appointing Faculty to Graduate Student Committees (C.2.4.2.1.f)**

A graduate committee should be selected by the student and advisor before the end of the student's third fall/spring semester of study. For a Master of Science thesis, this committee, at a minimum, is composed of the faculty advisor, another faculty member from Mechanical Engineering, and an 'outside' committee member from a department other than Mechanical Engineering. For a Doctor of Philosophy thesis, this committee, at a minimum, is composed of the faculty advisor, two additional faculty members from Mechanical Engineering, and an 'outside' committee member from a department

other than Mechanical Engineering. Please refer to Section 9 to determine eligibility for serving as a committee member as well as the latest version of the Mechanical Engineering Graduate Student Handbook.