

CODE OF THE MECHANICAL ENGINEERING DEPARTMENT (last revised September 2021, approved by faculty October 4, 2021)

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

1. Department Mission (C.2.4.2.1c)

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 BS, MS/ME and 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/Academic Vice President. Upon the Dean's receipt, the Department shall begin to operate in accordance with its procedures, subject to any limitations of the University code. 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 Regular Faculty, Career Line Faculty, faculty on transitional appointments, affiliate faculty, visiting faculty, and emeritus professors. Regular Faculty are 9-month tenure-track Assistant Professors or tenured Associate Professors and Full Professors. Career Line faculty include Research Investigators, Senior Research Investigators, Master Research Investigators, Assistant Research Professors, Associate Research Professors, Research Professors, Instructors, Senior Instructors, Master Instructors, Assistant Professors of Practice, Associate Professors of Practice, and Professors of Practice.

Eligible faculty members are all Regular and Career Line faculty members. Faculty on transitional appointments, 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 University code, 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 The 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 code of the University (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 code of the University.

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 The Associate Department Head for Graduate Studies

An Associate Department Head for Graduate Studies shall be appointed by the Department Head from the eligible faculty at the rank of Associate Professor or higher, and confirmed by a majority vote of the eligible faculty. 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 written request from the Department Head.

6.4 The Associate Department Head for Undergraduate Studies

An Associate Department Head for Undergraduate Studies shall be appointed by the Department Head from the eligible faculty at the rank of Associate Professor (Regular or Career Line) or higher, and confirmed by a majority vote of the eligible faculty. 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 departmental 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 The Executive Committee

The Executive Committee of the department is composed of the Department Head and the Associate Heads of Undergraduate and Graduate Studies. The Executive Committee shall consider, among other items:

1. actions on hiring and termination of administrative professionals in accordance with procedures specified in the University administrative professional manual (D.5),
2. academic year priorities and agenda for the Undergraduate and Graduate Committees, and
3. procedures for periodic evaluation of faculty (described in Section 9.5).

6.6 The Standing Committees of the Department of Mechanical Engineering

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 these standing committees shall be to develop and recommend to the faculty 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, Awards Committee, Graduate Committee, and Undergraduate Committee.

6.6.3 Standing Committees: Membership and Function

6.6.3.1 Tenure and Promotion Committee – For a Regular Faculty candidate seeking promotion, the Tenure and Promotion Committee shall consist of all tenured, Regular Faculty above the current rank of the candidate. The Department Head will nominate the Chair for the Tenure and Promotion Committee. For a candidate seeking tenure only (and not promotion), the committee shall consist of all tenured, Regular Faculty above the current rank of the candidate. Professors emeritus may sit on the committee but shall not vote. If the number of voting members is less than three, the Department Head shall appoint other faculty from the College of Engineering of appropriate rank, in accordance with E.10.5.1. The Department Head, as necessary, will call meetings of the Tenure and Promotion Committee.

6.6.3.2 Career Line Promotion Committee – The Career Line Promotion Committee shall consist of all Career Line faculty at or above the rank being sought by the candidate. The Career Line Promotion Committee shall contain at a minimum three (3) Career Line members at the rank or above being sought for promotion. If the department does not have three qualified Career Line members, at the discretion of the Department Head, other Career Line members will be appointed to the committee, preferably from within the WSCOE, and may be of differing faculty classifications. If WSCOE cannot provide additional Career Line faculty, Career Line faculty committee members may be sought from science and engineering-related fields within CSU to serve on the committee (e.g., natural sciences). A chair of the committee will be appointed by the Department Head. The committee will meet annually and review the

progress of all Instructors, Assistant Professors of Practice, Research Investigators, and Assistant Research Professors. The committee is charged with evaluating the current level of accomplishment of the Instructors, Assistant Professors of Practice, Research Investigators, and Assistant Research Professors as it relates to promotion to Senior Instructor, Associate Professor of Practice, Senior Investigator, and Associate Research Professor, respectively. In addition, a comprehensive performance review of each Instructor, Assistant Professor of Practice, Research Investigator, and Assistant Research Professor shall be conducted by the midpoint of their probationary period.

6.6.3.3 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.

6.6.3.4 Graduate Education Committee – The Graduate Education Committee shall consist of Regular 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 Studies, 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:

1. graduate course matters, graduate recruitment, retention, and advising issues, and
2. graduate program of study and examination procedures.

The Graduate Education Committee shall select and recruit graduate teaching assistants (GTAs) for all departmental courses having GTA allocations. The committee 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. In addition, the Graduate Education Committee shall assign an initial academic advisor to every student who enters the graduate program.

6.6.3.5 Undergraduate Committee – The Undergraduate Committee shall consist of the Associate Department Head for Undergraduate Studies as Chair, two other department faculty appointed by the Department Head, and the department manager for undergraduate academic advising. The Chair will set the priorities and agenda for the committee. This committee shall act on academic issues including but not limited to:

1. undergraduate course matters including requests for add/drop of undergraduate courses and major and minor changes to undergraduate courses, ABET accreditation preparedness,
2. undergraduate student retention and advising issues, and
3. preparation and distribution of informational material for undergraduate program recruiting and promotion.

6.6.4 Ad-hoc Committees

The Department Head may form or abolish committees to carry out the functions of and to 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. Examples of ad-hoc committees include those for curriculum development, code/accreditation, scholarships, external relations, and diversity, equity, and inclusion.

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

Operational policies governing a self-evaluation are defined in the University code (C.2.4.2.2.d). When any of the following situations occur:

1. the Provost requests an evaluation,
2. 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
3. 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 the self-evaluation shall be at the discretion of the committee. The committee is to review department operations including but not limited to the following:

1. undergraduate and graduate teaching and learning, including progress toward ABET accreditation,
2. progress of the department's current strategic plan, and
3. the departmental code.

The committee shall consolidate all of its findings and recommendations into a written report, within sixteen weeks after formation of the committee, or in accordance with the Provost/Academic 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/Academic 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

Students may appeal academic decisions. Student appeals of academic decisions include but are not limited to decisions on grades and other student academic evaluations. Disciplinary decisions on academic dishonesty or other kinds of misbehavior are specifically excluded from these appeals procedures.

In appeals of academic decisions, the burden of proof lies with the student. The student must demonstrate that the decision was based on any of the following:

1. a decision on some basis other than performance and other than as a penalty for academic dishonesty,
2. standards unreasonably different from those which were applied to other students, and / or
3. substantial, unreasonable, or unannounced departure from previously articulated standards.

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 Studies,

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. The request must set forth the basis for the appeal, identifying one or more of the three categories set forth above. The request must be submitted or postmarked (if mailed) no later than 30 calendar days after the first day of classes of the next regular semester following the date the grade was recorded. If no appeal is filed within this period, the grade shall be considered final.

The Appeal Coordinator shall provide a copy of the appeal to the faculty member(s) involved, and will ask for a written response. The Appeal Coordinator shall then review both the appeal and response, and may elect to separately interview the student and faculty member(s) before reaching a decision. The decision will be based upon whether one of the conditions for an appeal set forth above has been met. If the decision involves a resolution satisfactory to the student and faculty member(s), all parties sign a written copy of the decision and the case is settled. If not, the case is submitted to the Department Head for committee review.

The Appeal Coordinator will report the outcome and reasons for the decision to the student and faculty member(s) in writing within 15 calendar days of receipt of the appeal.

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. This committee shall be composed of two faculty members (neither of whom shall be involved in the appeal), two students from within the department and one outside faculty member who shall serve as the voting Chair. The Appeals Committee will review the written appeal and response of the faculty member(s). They may elect to separately interview both the student and the faculty member(s) before rendering a decision. The decision of the Appeals Committee will be based upon whether one of the conditions for an appeal set forth above has been met.

At the conclusion of the deliberations, the committee shall render one of the following decisions:

1. the original grading decision is upheld, or
2. the Department Head will reevaluate the student's achievement of the instructional objectives of the course and assign a grade accordingly.

Written notice of the committee's decision and the reasons for the decision will be sent to the student and the faculty member(s) within 30 calendar days of appointment of the committee. The committee's decision is the final decision of the University. Written summaries of the hearing and decision, together with a rationale for that decision, shall be provided to the student and the faculty member(s) who assigned the grade and shall be retained in the department for a period of one year.

9. Personnel Policies of the Department

9.1 Policies and Tenure and Promotion of Regular Faculty (C.2.4.2.1.e)

9.1.1 Internal titles defined

Assistant Professor.

Requirements: Earned PhD in mechanical engineering or closely aligned discipline. This is a full-time teaching and research term appointment. Assistant Professors are eligible as defined in section 3.

Rights and responsibilities: Assistant 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 and scholarly products (e.g., patents) as the senior author in their research field. Alongside, they are expected to demonstrate professional development in teaching and engineering education. They should start to demonstrate a larger scale reputation and concentrate on 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 for promotion to this rank: Earned PhD in mechanical engineering or closely aligned discipline and a minimum of five (5) years of experience as an Assistant Professor (or equivalent). Given extenuating circumstances, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a full-time teaching and research term appointment. 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 a leader in their chosen field. 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.

Full Professor.

Requirements for promotion to this rank: Earned PhD in mechanical engineering or closely aligned discipline and a minimum of five (5) years of experience as an Associate Professor (or equivalent). Given extenuating circumstances, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a full-time teaching and research term appointment. Full Professors are eligible as defined in section 3.

Requirements for promotion to this rank: Full 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 and Promotion

The Department Head shall initiate recommendations for tenure and promotion, at the minimum, at the start of the Fall semester preceding the expected decision. For each member recommended, 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.

9.1.3 Promotion Dossier for Regular Faculty

The latest version of the promotion dossier template for Regular Faculty can be found at the following link on the Office of the Provost and Executive President's website: <https://provost.colostate.edu/faculty-administrative-professionals/>. The template can be found under the sub-heading 'Promotion and Tenure'. The requirements for what needs to be included in the promotion dossier can change from year to year but they are briefly summarized below:

- Summary statement that outlines the case for tenure and promotion through research, teaching, and service accomplishments (limited to 3 pages)
- Highlighted activities of special interest (limited to 1 page)
- Original appointment letter
- A complete curriculum vitae that includes:
 - education, training, and employment history;
 - awards;
 - publications and scholarly record;
 - external and internal, funded contracts and grants, both completed and ongoing;
 - external and internal, unfunded contracts and grants;
 - presentations at professional meetings including conferences, workshops, seminars, and symposia;
 - presentations at professional meetings delivered by students, postdoctoral scholars, and research scientists;
 - courses taught, syllabi, and improvements made;
 - development of new courses;
 - summary of peer and student evaluations;
 - student advising including senior design projects, Bachelors of Science thesis, Masters of Science thesis, and Doctor of Philosophy dissertation;
 - mentoring of postdoctoral scholars and research scientists;
 - involvement in department, college, and university committees;

- professional affiliation and activities including membership in professional societies, reviewer for proposals, journals, and book chapters
- Copies of annual evaluations/progress reviews for past three years by the Department Head and Tenure & Promotion Committee, as appropriate
- Copies of Progress to Tenure Reviews (if application is for tenure)
- Copy of Mid-Probationary Review (if application is for tenure)
- Copy of most recent Periodic Comprehensive Review (if applicant is tenured)

The Department Head, in consultation with the applicant, will solicit ~8-10 external letters of recommendation to be appended to the promotion dossier. These letters will remain confidential and will not be shared with the applicant.

9.2 Policies and Promotion of Career Line Teaching Faculty

9.2.1 Internal titles defined

Career Line Teaching Faculty are typically assigned a 90% teaching and 10% service activities distribution effort. These efforts may be adjusted and negotiated with the Department Head depending on inclusion of significant scholarship activities, teaching, and/or an increased service component.

Instructor.

Requirements: Earned MS in mechanical engineering or closely aligned discipline. This is a full-time teaching term appointment. 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 buy-out with the Department Head to support such work. The Instructor should start to demonstrate a larger scale reputation and concentrate on excellence in teaching methods.

Senior Instructor.

Requirements for promotion to this rank: Earned MS in mechanical engineering or closely aligned discipline and a minimum of five (5) years of academic or industrial experience as an Instructor (or equivalent position providing such experience). Given extenuating circumstances, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a full-time teaching term appointment. Instructors are eligible as defined in Section 3 and are supported on a continuing appointment. At the Department Head's discretion and after 1 year of service at CSU in this position, the continuing appointment could be converted into a contract.

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 Professors of Practice and should demonstrate active participation in professional societies. With approval by a two-thirds 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 for promotion to this rank: Earned MS in mechanical engineering or closely aligned discipline and at least five (5) years of academic or industrial experience as a Senior Instructor (or equivalent position providing such experience). Given extenuating circumstances, 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 full-time teaching term appointment. Master Instructors are eligible as defined in Section 3 and are supported on a continuing appointment. At the Department Head's discretion and after 1 year of service at CSU in this position, the continuing appointment could be converted into a contract. This may be demonstrated 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. Direct placement into this rank requires approval of the Career Line Promotion Committee.

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 buy-out 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 Professors of Practice, or Associate Professors of Practice. With approval by a two-thirds 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 Professor of Practice.

Requirements: Earned PhD in mechanical engineering or closely aligned discipline. This is a full-time teaching term appointment. Assistant Professors of Practice are eligible as defined in Section 3.

Rights and responsibilities: An Assistant Professor of Practice 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 Professors of Practice 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 Professor of Practice should start to demonstrate a larger scale reputation and concentrate on excellence in teaching methods. With approval by a two-thirds 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 Professor of Practice.

Requirements for promotion to this rank: Earned PhD in mechanical engineering or closely aligned discipline and a minimum of five (5) years of experience as an Assistant Professor of Practice (or equivalent). Given extenuating circumstances, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a full-time teaching term appointment. Associate Professors of Practice are eligible as defined in Section 3 and are supported on a continuing appointment. At the Department Head's discretion and after 1 year of service at CSU in this position, the continuing appointment could be converted into a contract.

Rights and responsibilities: In addition to the duties of an Assistant Professor of Practice, as Associate

Professor of Practice 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 Professors of Practice may also engage in mentoring of Assistant Professors and Assistant Professors of Practice and should demonstrate active participation in professional societies. With approval by a two-thirds 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.

Professor of Practice.

Requirements for promotion to this rank: Earned PhD in mechanical engineering or closely aligned discipline and at least 5 years of experience as an Associate Professor of Practice (or equivalent). Given extenuating circumstances, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a full-time teaching term appointment. Professors of Practice are eligible as defined in Section 3 and are supported on a continuing appointment. At the Department Head's discretion and after 1 year of service at CSU in this position, the continuing appointment could be converted into a contract. Promotion into this rank requires one to have a nationally recognized impact in engineering education. This may be demonstrated 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. Direct placement into this rank requires approval of the Career Line Promotion Committee.

Rights and responsibilities: In addition to the duties of an Associate Professor of Practice, 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 buy-out with the Department Head to support such work. A Professor of Practice should have a documented track record of successful mentoring of Assistant Professors, Associate Professors, Assistant Professors of Practice, or Associate Professors of Practice. With approval by a two-thirds 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 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 Teaching Faculty by the start of the fall semester preceding the expected decision. For each member recommended, the Department Head shall convene the Career Line Promotion Committee.

In the case of reviewing promotions initiated by the Department Head, 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) 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 chair shall, within two weeks, deliver the written recommendation to the Department Head. 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, and the faculty member's and promotion committee's written response, will be forwarded by the promotion committee to the WSCOE Dean for a 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 teaching effectiveness and the impact that the Career Line Teaching Faculty 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 completed promotion dossier must include:

- Narrative statement of teaching goals and philosophy,
- Narrative statement on teaching impact and self-evaluation of teaching effectiveness,
- Supervisor and/or peer evaluation notes from teaching observations,
- A teaching matrix outlining courses taught, enrollment in courses, and whether significant course revision was performed (See Appendix), and
- Review of the promotion dossier from Career Line Teaching Faculty or teaching faculty who are external to CSU.

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

Teaching

- Detailed curricular revisions and program development information,
- Evidence of integration of critical thinking activities into courses,
- Evidence of effective technology use in teaching and learning,
- Evidence of innovations in courses (e.g., improvements on past practices or efforts to incorporate new knowledge and processes within the discipline),
- Lessons and assessments,
- Student work samples,
- Data and excerpts from student course evaluations,
- Teaching honors and awards, and
- Intramural and extramural communications that recognize teaching excellence.

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.

Service

- Administration of a teaching program or learning center,
- 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 external professional organizations, and
- Letters of support (can be internal or external to CSU, including industry representatives and former students).

9.3 Policies and Promotion of Career Line Research Faculty

9.3.1 Internal Titles Defined

Research Investigator.

Requirements: Earned MS in mechanical engineering or closely aligned discipline. This is a full-time research appointment. Research Investigators are eligible as defined in Section 3.

Rights and responsibilities: Research Investigators are expected to demonstrate excellence in research, assist and support faculty in research, pursue an interdependent research program with documented grant support as the Principal Investigator, Co-Principal Investigator or project participant. The Research Investigator is expected to develop a strong record of archival publications as the senior author in their research field. With approval by a two-thirds majority vote by the Graduate Education Committee, Research Investigators may sit on graduate student committees (MS).

Senior Research Investigator.

Requirements for promotion to this rank: Earned MS in mechanical engineering or closely aligned discipline and a minimum of five (5) years of experience as an Research Investigator (or equivalent). Given extenuating circumstances, the Department Head can initiate a promotion review before the 5 years of experience is met. Senior Research Investigators are eligible. This is a full-time research appointment. Senior Research Investigators are eligible as defined in Section 3 and are supported on a continuing appointment..

Rights and responsibilities: Senior Research Investigators are expected to continue their high-quality research activities and establish a reputation in their chosen field. With approval by a two-thirds majority vote by the Graduate Education Committee, Research Investigators may sit on graduate student committees (MS) and serve as the co-advisor/chair on Master of Science thesis committees with an Associate Research Professor, Research Professor, or tenured or tenure-track faculty member serving as the major advisor.

Master Research Investigator.

Requirements for promotion to this rank: Earned MS in mechanical engineering or closely aligned discipline and at least 5 years of experience as a Senior Research Investigator (or equivalent). Given extenuating circumstances, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a full-time research appointment. Master Research Investigators are eligible as defined in Section 3 and are supported on a continuing appointment. Promotion to the rank of Master Research Investigator requires that the candidate has developed a research program with documented grant support as the Principal Investigator or Co-Principal Investigator, a strong record of archival publication, and has established a reputation as a leader in their field of interest.

Rights and responsibilities: Master Research Investigators are expected to continue their high-quality research activities and build upon their reputation as a leader in their chosen field. With approval by a two-thirds majority vote by the Graduate Education Committee, Master Research Investigators may sit on graduate student committees (MS) and serve as the co-advisor/chair on Master of Science thesis

committees with an Associate Research Professor, Research Professor, or tenured or tenure-track faculty member serving as the major advisor.

Assistant Research Professor.

Requirements: Earned PhD in mechanical engineering or closely aligned discipline. This is a full-time research appointment. 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 two-thirds 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 for promotion to this rank: Earned PhD in mechanical engineering or closely aligned discipline and a minimum of five (5) years of experience as an Assistant Research Professor (or equivalent). Given extenuating circumstances, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a full-time research appointment. 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 a leader in their chosen field. 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 for promotion to this rank: Earned PhD in mechanical engineering or closely aligned discipline and at least 5 years of experience as an Associate Research Professor (or equivalent). Given extenuating circumstances, the Department Head can initiate a promotion review before the 5 years of experience is met. This is a full-time research appointment. 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 an international leader in their chosen field. 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 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. For each member recommended, the Department Head shall convene the Career Line Faculty Promotion Committee.

In the case of reviewing promotions initiated by the Department Head, 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 chair shall, within two weeks, deliver the written recommendation to the Department Head. 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 (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, and the faculty member's and promotion committee's written response, will be forwarded by the promotion committee to the WSCOE Dean for a further consideration.

9.3.3 Promotion Dossier for Career Line Research Faculty

The promotion dossier is intended to be a set of documents that highlights research and scholarly accomplishment/impact that the Career Line Research Faculty has had on the research 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 completed promotion dossier must include:

- 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 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 main 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.

- 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.
- Presentations at conferences, workshops, colloquia or seminars. Keynote, plenary and invited talks will be noted.
- 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.
- 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 appropriate component of a Research Faculty member's duties. External professional service is also important and should be included in the assessment. Type 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.
- Letters of support (can be internal or external to CSU, including industry representatives and former students).

Teaching

Research faculty members are not typically expected to do classroom teaching, but they are expected to advise undergraduate and/or graduate students on their research projects. In those cases where a Research Faculty member teaches a class, this should be assessed as well. Supporting documentation of teaching activities may include:

- A teaching matrix outlining courses taught, enrollment in courses, and whether significant course revision was performed (See Appendix).
- Detailed curricular revisions and program development information.
- Evidence of integration of critical thinking activities into courses.
- Evidence of effective technology use in teaching and learning.
- Evidence of innovations in courses (e.g., improvements on past practices or efforts to incorporate new knowledge and processes within the discipline).
- Lessons and assessments.
- Student work samples.
- Data and excerpts from student course evaluations.
- Teaching honors and awards.

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 Regular 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 three eligible faculty members, in addition to the Chair, who is appointed by the Department Head. The Chair must have previously been through the University Equal Opportunity (EO) Search Chair training program and all committee members must have completed the EO 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)

The Department Head will use an interview, along with completion of the faculty activity report, Digital Measures report and an updated curriculum vitae, for the annual evaluation of Regular Faculty. Format and procedures for the interview and activity report shall follow both College guidelines as well as University code, including a written evaluation provided by the Department Head and signed by the Department Head and the faculty member.

Every Senior Instructor, Master Instructor, Associate Professor of Practice, Professor of Practice, Senior Research Investigator, Master Research Investigator, Associate Research Professor, and Research Professor will have a comprehensive performance evaluation performed by the Department Head every five years.

Any faculty member has the right to question a decision related, either in part or in whole, to his or her performance evaluation.

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 work load include:

1. 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),
2. Committee assignments
3. Research activities,
4. Outreach activities,
5. Number of graduate advisees,
6. Student chapter advising,
7. Professional and honor society activity.

10. 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 fourth 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.