

**The Graduate Program in Mechanical & Aerospace Engineering (MAE) trains Masters of Engineering and Master of Science students in the scientific and engineering fundamentals in the broad set of core disciplines required in the mechanical and aerospace engineering fields. Students exiting the program should be prepared for further graduate study and for employment in the mechanical & aerospace industries along with related fields.**

**Learning Goal 1** for Students: Attain mastery of the essential aspects of practice and research in mechanical and/or aerospace engineering.

Assessment of student achievement of Goal 1:

- Grades in graduate courses.
- Assessment of student's performance by committee of graduate faculty members.
- Placement of students in professional position, or continuation of graduate studies in PhD program, that requires skills and fundamental knowledge of mechanical and/or aerospace engineering.

Roles of the program in helping students to achieve Goal 1:

- Close advising beginning with an orientation upon arrival and including tracking of milestones and professional development.
- Evaluations of course quality and teaching effectiveness.
- Periodic review of curricular offerings, degree requirements and assessment tools.

**Learning Goal 2** for Students: Engage in and conduct original research (for M.Sc. with thesis) or conduct in-depth study, analysis, and design for an engineering project (for M.Eng.)

Assessment of graduate student achievement of Goal 2:

- Assessment of quality of Master's thesis or project.
- Public defense of thesis or project.
- Critical reading of thesis or project report by committee of graduate faculty members
- Achievement of students as evidenced by professional placement, continuation of graduate studies, selection for conference presentations, peer-reviewed publications, or patent applications.

Role of the program in helping graduate students to achieve Goal 2:

- Provide formalized process for learning about research opportunities through faculty presentations and an updated list of available research topics.
- Provide opportunities to present research/project and receive feedback through student seminars.
- Provide comprehensive advising and assist in the identification of mentors.

**Learning Goal 3** for Students: Prepare to be professionals in the mechanical and/or aerospace industries or related fields, or for further graduate studies.

Assessment of graduate student achievement of Goal 3:

- Participate in professional networking through department activities.
- Participation in internships and other work tailored to career goals.
- Collection of data on professional placement or continuation of graduate studies.
- Review by industrial advisory board.

Role of the program in helping students achieve Goal 3:

- Host professional development and career exploration activities .
- Provide flexible options for students with interdisciplinary interests related to mechanical and aerospace engineering.
- Host seminars by external faculty in mechanical and/or aerospace engineering.
- Develop or enhance programs related to job and networking skills, including activity in professional societies.

**The leadership of the Mechanical & Aerospace Engineering graduate program** will regularly review the structure and content of the program and the feedback received from assessments and surveys. These reviews will be used to provide the best possible education to students to meet the needs for highly trained individuals in mechanical & aerospace engineering.