



# **Mentoring Program Handbook**

Department of Mechanical and Aerospace Engineering http://mae.rutgers.edu



# DEPARTMENT OF MECHANICAL AND AEROSPACE ENGINEERING





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The Rutgers MAE Mentoring Program was developed following the Penn State Best Practice programs in Mechanical and Nuclear Engineering

### 1. Purpose of this Document

This handbook provides an overview of the Rutgers Mechanical Engineering Mentoring Program for the purpose of establishing general guidelines about the scope and purpose of the mentoring, pairing process mentor-mentee process, and a description of additional resources.

# 2. Program Description

#### Mission

The mission of the Mentoring Program is to enhance the professional development of students on the mechanical engineering and the aerospace engineering programs by providing a personalized guidance, counsel and networking opportunities.

#### Overview

The Mechanical and Aerospace Engineering Department (MAE) and the MAE Advisory Board (AB) jointly sponsor the Mechanical Engineering Mentoring Program. The program provides students with opportunities to interact with mechanical engineering alumni on a one-to-one basis and to receive advice and recommendations related to the academic and professional development of the student.

#### **Roles and Responsibilities**

The roles and responsibilities of the Mechanical Engineering Mentoring Board as well as those of Students, and Mentors, participating in the mentoring program are as follows:

#### Mechanical & Aerospace Engineering Mentoring Board

The Mechanical & Aerospace Engineering Mentoring Board is responsible matching students and alumni mentors to maximize the benefits of the mentoring process. Composed of MAE faculty member(s), AB alumni board member(s), and senior mechanical engineering student(s) who have participated in the program. The Mechanical & Aerospace Engineering Mentoring Board will also have the responsibility of monitoring the effectiveness and success of the program.

#### Students

Beginning in the second semester of their sophomore year, all mechanical engineering undergraduate and graduate students are eligible to participate in the mentoring program on a voluntary basis.

#### Mentors

Mentors (alumni or other) serve on a voluntary basis.



# 3. Mentoring Process

The Mechanical and Aerospace Engineering mentoring program consists of the three primary phases: Registering, Matching and Mentoring as shown in Figure 1.

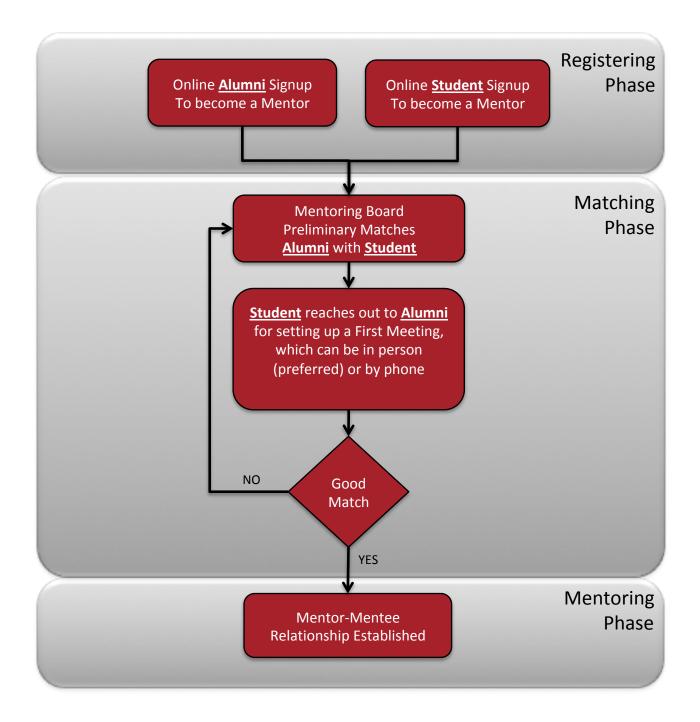


Figure 1: Mentoring Process

#### **Registering Phase**

Both students and mentors must register as follows to participate in the Mechanical ans Aerospace Engineering Mentoring Program:

#### Students

Students begin the process of obtaining a mentor by registering online at <u>https://docs.google.com/forms/d/1sj7ONuPZ5-iczLx\_uz0xwbv9yZStmpMojeB6OT5310</u> and providing both contact and background information.

#### Mentors

Prospective mentors can volunteer by registering online at <u>https://docs.google.com/forms/d/1Na-</u> <u>q\_6prIFuoxs7sGuAN\_4lCTG2RjTvEGlGsIuF3F-Q</u>. To assist in pairing mentors and students, mentors provide contact and background information similar to that requested of the students.

#### **Matching Phase**

The Mechanical and Aerospace Engineering Mentoring Board analyzes registration information submitted by students and alumni to define student-alumni matches, and notifies both the student and alumni. The Board also provides them with each other's background information. It is the responsibility of the student to arrange an initial meeting with the alumni either by telephone or in person (preferably).

The student should contact the mentor within a week of receiving the mentor's background information and arrange for an initial meeting within no more than two weeks.

During the initial meeting, the student and mentor should assess their satisfaction with their matches. If the student and/or alumni do not feel the match is appropriate, the Mechanical and Aerospace Engineering Mentoring Board is notified and a new alumnus/a is matched with the student.

#### **Mentoring Phase**

The mentoring phase of the Mechanical Engineering Mentoring Program is continuous and lasts as long as the mentor and mentee want to maintain the relationship. However, at the end of the first semester of the mentoring relationship, the mentee and mentor are asked to submit a satisfaction survey to the Mechanical and Aerospace Engineering Mentoring Board. The Board will review the mentee-mentor relationship and consider re-pairing if that relationship has not met expectations.

The success of the mentoring phase is highly dependent on the relationship between the student and mentor. Face-to-face mentoring meetings and joint participation of the student and mentor in appropriate social or professional events can strengthen this relationship.



#### Updating Mentor Profile and Status

The Mentor Profile is an important tool used by the Mentoring Board. It should be updated at least once per semester by the mentor for one or more reasons:

- 1. To indicate contact has been made with the student, and when applicable that contact has been lost. If status is not maintained, the Mentoring Board has no way of knowing a mentor and a mentee have lost contact, and the mentor could be paired with another interested student.
- 2. To update how many students the mentor wants assigned to him or her. Mentors who want to take time off can set the number to zero and will not be assigned a new student until the number is updated.
- 3. To update the mentor's career information, resume and contact information when needed.

# **Schedule of Key Activities**

A summary of the key activities and milestones for the Mechanical Engineering Mentoring program is provided in Table 1.

Action	Responsibility	Timing
Alumni Mentors Register	Alumni	Continuous
Student Orientation to Mentoring Program	MAE Department and AB Board of Directors	Fall semester
Students Register	Student	Early Spring Semester
Students-Alumni Matched	Mechanical Engineering Mentoring Board	Continuous
Students –Establish Contact, Begin Mentoring Relationship	Student	1-2 weeks after matching
Mentors – Report If In Contact with Student or If Contact Lost	Alumni	Initial Contact within 30 days of match. Lost contact as appropriate
Mentors Update Profile – Student Status, Number of Students Desired for Mentoring, Profile Information	Alumni	End of each semester or as- needed
Submit Annual Satisfaction Survey	Mentee-Mentor	Following the end of the Spring Semester

# Appendix A – Reference Documents

Links to the following documents are posted online at tbd to assist potential mentors and students:

#### Guidelines for the Student

A guide designed to assist students in developing and effectively utilizing the mentoring relationship. Included are sample questions the student might ask during the early stages of the student-mentor relationship.

#### Guidelines for the Mentor

Describes the role of a mentor and summarizes best practices employed in developing an effective student-mentor relationship.

#### Alumni-Student Mentoring Program Goals and Action Plans - Form and Guidelines

- A form used (optional) by students and mentors to
- 1) identify specific goals of the mentoring relationship and
- 2) detail an action plan to achieve those goals including guidelines and examples.

#### Satisfaction Form (Feedback on Mentoring Relationship)

A form prepared annually by a student and their mentor to assess the level of satisfaction with the student-mentor match and the conduct of the relationship. If the student and/or the mentor are not satisfied, the relationship will be reviewed for reassignment.

#### Mentoring Handbook

The Mentoring Handbook outlines the mission and conduct of the Mechanical and Aerospace Engineering Mentoring Program. This handbook identifies the responsibilities of those involved in the mentoring process and describes the three key elements of the mentoring program: Registering-Matching-Mentoring.









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