

Future Academic Scholars Training II for MAE

MECHENG 8902

Credit Hours:

2.00 - 2.00

Course Levels:

Graduate (5000-8000 level)

Course Components:

Lecture

Course Description:

To provide Ph.D. students in the Department of Mechanical and Aerospace Engineering an opportunity to learn and understand what it takes to get an academic position in a research university and to become a successful faculty member.

Prerequisites and Co-requisites:

Prereq: PhD student in Mechanical, Aerospace, or Nuclear Engineering; or instructor permission

Course Goals / Objectives:

- Understand the required skills and background for an academic position and the components of the academic job search
- Practice key aspects of the academic job search, such as preparing the application package and ?job talk?
- Understand how to successfully navigate the tenure process
- Identify potential funding agencies and the differences between industrial, federal, and foundational grant opportunities
- Practice key aspects of applying for a grant, such as writing a proposal and making a budget
- Understand time management strategies and how to obtain a work/life balance

Course Topics:

- Building Necessary Skills to Get a Faculty Position: skills and background required to get a faculty position, U.S. academic system, different types of universities, faculty profiles
- Academic Job Search: finding positions, postdoctoral vs. faculty, preparing a strong application
- Academic Job Search: on-campus interview, job talk, negotiating the offer, start up package
- Academic Job Search: peer review of application packages
- Academic Job Search: peer review of mock job talks
- Becoming a Successful Faculty: What is tenure? Tenure clock, teaching/research/services, etc.
- Becoming a Successful Faculty: seeking basic research funding, elements of a successful grant proposal, interdisciplinary proposals, budgeting
- Becoming a Successful Faculty: seeking applied research funding
- Becoming a Successful Faculty: intellectual properties/conflict of interest
- Becoming a Successful Faculty: good practices for recruiting and mentoring students
- Becoming a Successful Faculty: peer review of mock proposals
- Becoming a Successful Faculty: professional/ethical conduct
- Becoming a Successful Faculty: time management tips, balancing teaching/research/service/life
- Assistant/Associate Professor Panel: how they got here and life thus

Designation:

Elective