APPLICATION

Mechatronics Option in Mechanical Engineering

What is Mechatronics? Mechatronics is the term originally coined to describe the integration of mechanical, electrical, and computer technologies into the design of complex products. Although products have long included all three components, traditional design methods viewed them as separate, independently realized aspects of the design. Mechatronics emphasizes global optimization by integrating these three components of the design process.

Senior Design Projects — These projects emphasize design of mechanical systems using embedded real-time computing, and will include the implementation of a prototype in the Embedded Computing Laboratory. These include projects in robotics, automation and controls.

Mechatronics Senior Capstone Design Project
To be eligible for a Mechatronics Capstone Design Project in the spring quarter of the senior year, you should take the following five pre-requisites courses: ME395, ME471, ME473, ME494 and ME477.

The Mechatronics Curriculum
Since the Autumn of 1996, the Department of Mechanical Engineering has offered a guided curriculum in mechatronics (see table of courses below).

Mechatronics Curriculum Senior Year

	Autumn Quarter	Winter Quarter	Spring Quarter
Mechatronics Core Courses	**ME 471** Automatic Control		**ME 495** Mechatronics Capstone Design
	ME 473 Instrumentation & Sensors	**ME 477** Embedded Computing	
	ME 395 Introduction to Mechanical Design	**ME 494** Mechatronics Design Preparation, 1cr	
Elective Courses for	**ME 469** Advanced Dynamics	PHYS **334** Electronics Design Lab I	**PHYS 335** Electronics Design Lab II
	ME 480 Comp.-Aided Technology	**ME 470** Mechanical Vibrations	**ME 478** Finite Element Analysis
	ME 478 Finite Element Analysis		

NOTE: ME 395 in earlier quarters is also acceptable.

Mechatronics Option Application:

- I wish to apply for the Mechatronics Option in Mechanical Engineering.
- I will complete ME 374 Spring Quarter, Year: _____

Last Name: _____ **First Name**: _____ **Student #**:_____

Submit this application to the ME Undergraduate Student Advisor, MEB 143B

Application decisions are made at the end of spring quarter. All applicants are notified by email.