ME Courses and Options



Presenters

- Professor Chi-Guhn Lee
 - Undergraduate Coordinator of MIE
- Professor Hani Naguib
 - Solid Mechanics & Design
- Professor David Steinman
 - Bioengineering
- Professor Aimy Bazylak
 - Energy & Environment
- Professor Matthew Mackay
 - Mechatronics
- Professor Michael Munro
 - Manufacturing & Capstone

Third Year (ME): Fall

- Core
 - MIE301F Kinematics & Dynamics of Machines
 - MIE312F Fluid Mechanics I
 - MIE334F Numerical Methods I
 - MIE342F Circuits with Applications to Mechanical Engineering Sys
 - MIE397Y Design Portfolio
- Natural Science Elective (1)
 - CHE353F Engineering Biology
 - CIV220F Urban Engineering Ecology
 - CIV300F/S Terrestrial Energy Systems

Third Year (ME): Winter

Core

- MIE315S Design for the Environment
- MIE333S Engineering Physics
- MIE341S Mechanical Engineering Design
- MIE397Y Design Portfolio
- Stream Options (2 streams)
 - MIE364S Quality Control & Improvement (Manufacturing)
 - MIE346S Analog & Digital Electronics for Mechatronics (Mechatronics)
 - MIE320S Mechanics of Solid II (Solid Mech & Design)
 - MIE313S Heat & Mass Transfer (Energy & Environment)
 - CHE354S Cellular and Molecular Biology (Bioengineering)
 - MIE331S Physiological Control Systems (Bioengineering)

^{*:} In 4F, students will have to take one additional course from each of the same streams followed in 3rd year.

Fourth Year (ME): Fall

- Core
 - MIE491Y Capstone
- Stream Courses (2)
 - MIE422F* (Manufacturing)
 - MIE404F (Mechatronics)
 - MIE442F (Solid Mech & Design)
 - MIE411F (Energy & Environ)
 - MIE520F (Bioengineering)
- CS Elective (1)

- Tech Electives (1)
 - AER307F
- MIE444F
- AER525F*
- MIE448F
- ECE344F
- Thesis (F/Y)
- MIE343F
- MIE515F
- MIE360F
- MIE516F
- MIE414F
- MSE330F
- MIE422F
- MSE401F
- MIE440F

^{*:} Students may take only one of MIE422 and AER525; AER525 has limited enrolment.

Fourth Year (ME): Spring

- Core
 - MIE491Y Capstone
- Tech Electives (3)
 - CIV440S
 - CHE475S MIE418S MIE469S
 - ECE344S MIE438S Thesis (S/Y)
 - FOR424S MIE439S MIE506S
 - MIE402S MIE441S MIE517S
 - MIE407S MIE443S MIE540S
 - MIE408S MIE464S MIE442S
- CS Elective (1)