

Engineering Science Electives

ONLY allowable 2000 level-courses:

**AE 2020	Low-Speed Aerodynamics , 3hr (Prereq: AE 1350, MATH 2401, Phys 2211)
**AE 2220	Dynamics , 3hr (Prereq: AE 1350, MATH 2401/MATH 2403/MATH 2413, Phys 2211)
ChBE 2100	Chemical Process Principles , 3hr (Prereq: CHEM 1310 and MATH 1502)
ChBE 2110	Chemical Engineering Thermodynamics I , 3hr (Prereq: ChBE 2100)
COE 2001	Statics , 2hr. (Prereq: MATH 1502, PHYS 2211)
ECE 2025	Introduction to Signal Processing , 4 hr. (Prereq: MATH 1502, CS1322/1371)
ECE 2030	Introduction to Computer Engineering , 3 hr. (Prereq: CS 1322/1371)
ECE 2040	Circuit Analysis , 3 hr. (Prereq: ECE 2025, PHYS2212, MATH 2403/2413)
ME 2202	Dynamics of Rigid Bodies , 3 hr. (Prereq: COE 2001/ME 2211/AE 2120)
**MSE 2001	Principles & Applications of Engineering Materials , 3hr. (Prereq: CHEM 1310)
**MSE 2020	Characterization of Materials , 3hr. (Prereq: MSE 2001)
PTFE 2200	Structure and Properties of Fibers and Polymers , 3hr. (Prereq: CHEM 1310, MATH 1501)

3000/4000-level courses that IE's have taken

**AE 3310	Introduction to Aerospace Vehicle Performance , 3 hr. (Prereq: AE 2020, AE 2220)
COE 3001	Deformable Bodies , 3 hr. (Prereq: COE 2001, MATH 2403)
**CEE 3000	Civil Engr Systems , 3hr. (Prereq: MATH 2401)
**CEE 3010	Geomatics , 3hr. (Prereq: AE/CEE/ME 1770, MATH 2401)
**CEE 4100	Construction Engr & Mgt , 3hr. -have to be a CEE major
**CEE 4300	Environmental Engineering Systems , 3 hr. (Prereq: CEE 2300)
**CEE 4600	Transportation Planning & Design , 3hr.
*CEE 4801	Special topics : Must be approved by IE Academic Advisor
*CEE 4803	Special Topics: Sustainability (GT Lorraine)
ECE 3035	Mechanisms for Computing Systems , 4 hr, (Prereq: ECE 2030, CS 1322)
ECE 3076	Computer Communications , 3hr. (Prereq: ECE 2025, ECE 2030)
ECE 3710	Circuits and Electronics , 2 hr. (Prereq: PHYS 2212/ 2232)
ECE 3741	Instrumentation and Electronic Lab , 1 hr. (Prereq: ECE 3710)
ECE 4823	Game Theory and Multiagent Systems , 3hr. (Prereq: ECE 2040/3710/ISYE 3133, ECE/ISYE 3770/ ISYE 2027)
ME 3057	Experimental Methodology , 3hr. (ME 3015, COE 3001, ME 3340, 3322, 3345, ISYE 3770)
ME 3720	Introduction to Fluid and Thermal Engineering , 3 hr. (Prereq: CHEM1310, PHYS2211, MATH2403)
ME 4763	Pulping and Chemical Recovery , 3hr. Cross listed with ChBE 4763
ME 4764	Bleaching and Papermaking , 3hr. Cross listed with ChBE 4764
**MSE 3012	Thermal & Transport Props , 3hr. (Prereq: PHYS 2212, MSE 2001)
**MSE 3025	Stats & Numerical Methods , 3 hr. (Prereq: CS1371, MSE 2001)
*NRE 4803	Probabilistic Risk Assessment , must be Junior/Senior
PTFE 3200	Yarn and Fabric Formation , 3hr. (Prereq: PTFE 2200)
PTFE 3220	Text Operations & Mgt Meth , 3hr. (Prereq: PTFE 3200)
PTFE 3720	Introduction to Fiber Enterprise , 3hr.

* Check with ISyE Advisor for permission to take these class

** Due to space limitations, CEE, AE and MSE classes will usually not be available to ISyE students.

- ISyE students cannot use ISyE courses for Engineering Elective requirement.
- Many of the allowable courses listed above have pre-requisite requirements. You will not be able to take the course unless you have met these requirements.
- Some departments may also only allow you to register for their courses during Phase II registration in order to give priority to their own students.
- Many of these classes are not offered during the summer semester. Plan your schedule accordingly.