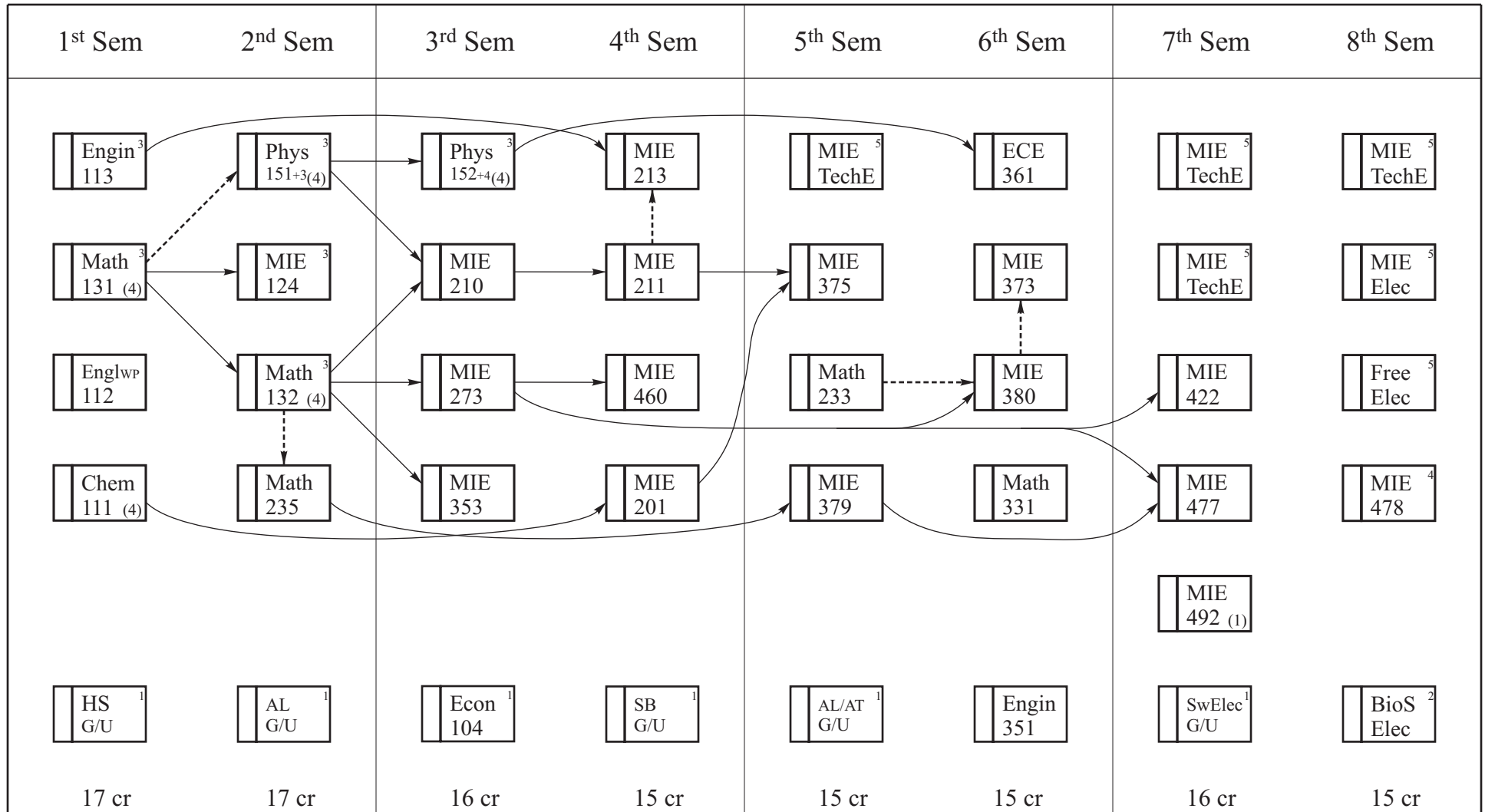


Mechanical and Industrial Engineering Department
INDUSTRIAL ENGINEERING CURRICULUM (IE 2003 - 2011)
 Curriculum for the Classes of 2003 - 2011, entering the IE Major after 1/2001



MIE (1) Note on reverse
401 (4) Credits, if other than 3
 Prerequisite course
 Prerequisite that may be taken concurrently

Scheduling Note: Courses offered vary from year to year and from semester to semester. The sequence of courses shown is only a sample. Students will plan their individual programs after consulting the University Pre-Registration Materials and the MIE Department Pre-Registration Notes.

Graduation Clearance: Both University and Department Cumulative GPAs of 2.0 are required for graduation.

Total Credits: 126
 Revised 4/13/2007
 Catalog 2001-02
 to 2007-08

IE Degree Program, Flowchart Notes

NOTE: The flowchart is not the official student record. It should be used in conjunction with your university transcript. Consult the Guide to Undergraduate Programs for more detailed explanations of department, college, and university graduation requirements.

Notes: 1. **Social World Requirement:** 6 COURSES (one from each group)

- 1) AL 4) HS or AL or AT or SB or I or SI
- 2) SB 5) AL or AT or I
- 3) HS 6) SB or I

Social World Diversity Requirement

For students who entered the University prior to Fall 2002, two of the six Social World courses must have a Diversity designation (D, G or U)

For students who entered the University during or after Fall 2002, one of the six Social World courses must have global diversity designation (G) and one must have a United States diversity designation (U)

- 2. **Biological Science Requirement:** Any course having the Biological Science (BS) designation.
- 3. **Alternative Courses:** An approved alternative exists to the “standard” course shown in the flow chart, e.g. Math 135 can be taken in place of Math 131. Please refer to the catalog.
- 4. **Capstone Prerequisites:** All required IE courses are corequisites for MIE 478, i.e. all required IE courses must be taken prior to or concurrently with MIE 478. Permission of the instructor is required in any case in which all prerequisites are not met.
- 5. **IE Program Electives:** The IE curriculum includes 4 MIE Tech Electives, an MIE Elective and a Free Elective. Students are encouraged to use elective courses to delve deeper into one of the application areas or disciplines related to the core IE curriculum. Advisors can help students in selecting appropriate groups of courses or “tracks.” Generally, electives are offered in only one semester and some are not offered every year.

An MIE elective is any MIE course at or above the 300 level except MIE 520 or MIE 586.. Courses related to IE but taught in other Engineering Departments, Math, or SOM may be acceptable. See Professor Rinderle for approval of non MIE courses.

The MIE Tech elective is any MIE elective except 585 and 587. Most upper level engineering and math courses will also be acceptable. See Prof. Rinderle for approval of non MIE courses.

The free elective can be any course at the university except one that is a prerequisite for a required course, e.g. Math 104.

MIE COURSE TITLES AND NUMBERS

MIE 201 Intro Materials Science	MIE 380 Stochastic Operations Research
MIE 210 Statics	MIE 395 Seminar, Engineering Professionalism
MIE 211 Strength of Materials	MIE 397B System Dynamics
MIE 213 Intro Mech and Indus Engr Design	MIE 402 ME Lab II
MIE 230 Thermodynamics	MIE 413 Design of Mechanical Assemblies
MIE 273 Probability and Statistics for Engineers	MIE 415 Design of Mechanical Systems
MIE 302 ME Lab I	MIE 418 Design of Mechanisms
MIE 310 Dynamics	MIE 422 Statistical Quality Control
MIE 313 Design of Mechanical Components	MIE 444 ME Automatic Controls
MIE 340 Fluid Mechanics I	MIE 460 Human Factors Engineering
MIE 353 Engr Economic Decision Making	MIE 477 Production Planning & Control
MIE 354 Heat Transfer	MIE 478 Capstone Design (IE)
MIE 373 Intro Simulation Methods	MIE 492 Seminar
MIE 375 Manufacturing Processes	MIE 497A Design Against Failure
MIE 379 Deterministic Operations Research	MIE 497E Thermo-fluid Design