

# RECOMMENDED MECHANICAL ENGINEERING CURRICULUM FLOW CHART

Effective for Students Entering ME January 2010 and Later

Semesters							
I	II	III	IV	V	VI	VII	VIII
Math 221 Calculus 5 F	Math 222 Calculus 5	Math 234 Calculus 3	ME 361 Thermo 3 I	ME 363 Fluids 3	ME 364 Heat Transfer 3	Elective Technical 3 E	ME 370 Energy Laboratory 3
EPD 155 Technical Comm. 2 F	Stat 224 Statistics 3	Math 320 Linear Alg Diff. Eqns 3	ME 306 Mechanics of Mats 3 I G	ECE 376 Circuits 3	ECE 377 Power Conversion 3	Elective Technical 3 E	Elective Technical 3 E
Intr Egr 101 or Intr Egr 102 2 B	EMA 201 Statics 3	ME 240 Dynamics 3 I	ME 307 Materials Lab 1 G	ME 340 Dynamic Systems 3	ME 368 Measuremts Lab 4	ME 342 Machine Elements 3	ME 349 or ME 352 Design Projects 3 H
Intr Egr 160 Intro to Engin. 3 B		MS&E 350 Mat'l Sci 3		ME 331 Geometric Modeling 3	ME 313 Manufact. Processes 3	ME 314 Compet. Manufact. 3	
ME 231 Graphics 2		CS 302 Intro to Prog. 3	Phys 202 General Physics 5	EPD 397 Technical Writing 3	Elective Technical 3 E		Elective Technical 3 E
Chem 103 General Chemistry 4 A	Chem 104 General Chemistry 5 A	Elective Liberal 3 D	Elective Liberal 3 D	Elective Liberal 3 D		Elective Liberal 3 D	Elective Liberal 3 D

Minimum Degree Credits Required = 128 (see note C)

The letters appearing at the lower left refer to notes on the following page.

The prerequisites for each class are listed at <http://www.engr.wisc.edu/me/courses/>

## FLOW CHART SUBSCRIPTS

(Revised February 10 2010)

- A. There are two options for the chemistry elective:  
Option 1—Chem 103, 4 credits and Chem 104, 5 credits  
Option 2—Chem 109, 5 credits. Note: If Chem 109 is taken, students may need free elective credits to meet the minimum number of credits (127) required for graduation. (See note C)
- B. InterEgr 101 or InterEgr 102 (2 credits) or InterEgr 160 (3 credits) all satisfy the college requirement for introduction to engineering.
- C. Students fulfilling their course requirements with fewer than 128 credits must take additional free-elective credits to comply with the 128 credit minimum graduation requirement.
- D. **LIBERAL STUDIES REQUIREMENTS:** Students must take 15 credits that carry H, S, L, or Z timetable breadth designators. These credits must fulfill the following subrequirements:
1. A minimum of 2 courses from the same department or program. At least 1 of these 2 courses must be designated as above the elementary level (I, A, or D) in the timetable.
  2. A minimum of 6 credits designated as humanities (H, L, or Z) in the timetable, and an additional minimum of 3 credits designated as social studies (S or Z) in the timetable. Foreign Language courses count as H credits. Retroactive credits for high school language courses may not be used to meet the Liberal Studies requirement.
  3. At least 3 credits in courses designated as ethnic studies (lower case "e") in the timetable. These courses may help satisfy requirements D1 and D2 as well, but they only count once toward the total required.  
Note: Some courses may have "e" designation but not have H, S, L, or Z designation; these courses do not count towards the liberal studies requirement.

### E. TECHNICAL ELECTIVES

The Mechanical Engineering curriculum requires a total of 15 credits of technical electives. A minimum of 12 of the 15 credits must be from formal courses. (A formal course is defined as a class which meets regularly in a lecture format to study a selected topic. The educational mission is assisted with homework and exams. Formal courses cannot be seminar, survey, or other similar courses.)

A minimum of 6 (of the required 12) formal course credits must be for Mechanical Engineering courses with course numbers 400 or higher or for ME 351. (See note H).

Up to 6 technical elective credits may be earned for formal classes in courses outside of the Mechanical Engineering Department. These courses may be engineering, mathematics, physics, chemistry, statistics, biology, or computer science courses numbered 400 and above. The courses listed below are also accepted as technical electives. Other courses may be accepted if approved by the Curriculum Committee in advance of taking the course:

Comp Sci 354, 367	BSE 351, 364	EPD 374, 375
Chemistry 341, 343, 345	CEE 311, 315, 316, 320, 325, 330, 355,	ISyE 323, 349
Math 321, 322	356, 370, 375	MS & E 330, 332, 352, 370
Physics 311, 321, 322, 325	CBE 320, 326	NEEP 305
Statistics 311, 312, 333, 349, 351	ECE 320, 330, 340, 342, 352, 353,	Bmolchem 314, Physiol 335
InterEgr 301	354, 355	

Up to 3 technical elective credits may be obtained for non-formal courses or activities such as outreach and independent study courses (ME 491, 492). Up to 1 credit of Cooperative Education (ME 001) can be counted for technical elective credit.

- F. EPD155 fulfills the Comm A requirement. If your GER communications Part A is satisfied you are exempt from this requirement. This requirement can also be fulfilled with: Ag Journ 100, Com Arts 100, Engl 100, Engl 118, or IES 200. (See note C)
- G. ME 306 and ME 307 shall be taken concurrently.
- H. There are two options for the capstone design experience: ME 349 taken alone or ME 351 and ME 352 taken sequentially. Students completing ME 352 will satisfy the requirement for ME 349 and will receive 3 technical elective credits for ME 351.
- I. A minimum grade of C is required in ME 240, ME 306, and ME 361.

### SPECIAL NOTES

- Students in their last semester before graduation taking less than 12 credits (part-time status) must have the Dean's permission to avoid probationary status.
- Advisor listing on your grades, file, etc. can be officially changed by going to Rm. 3182 ME.
- Problems and questions concerning this curriculum should be directed to: Student Services Staff, Rm. 3182 ME, or your Mechanical Engineering Advisor.
- Mechanical Engineering's website is found at: <http://www.engr.wisc.edu/me/>