GENERAL REQUIREMENTS

COMMUNICATIONS:- (9)
Engl  111X (3)____
Engl  211X or 213X (3)____
Comm 131X or 141X (3)____

PERSPECTIVES ON THE HUMAN CONDITION:- (18-22)
Complete the 6 courses listed OR 4 of those listed
plus 2 semester length courses in a single AK Native or
other non-English language or 3 semester length
courses (9 credits) in American Sign Language.

A. Complete the following:- (37)
M.E. 302 (4)____
M.E. 308 (3)____
M.E. 313 (3)____
M.E. 321 (3)____
M.E. 334 (3)____
M.E. 403 (3)____

*MAJOR REQUIREMENTS

A. Complete the following: (37)
M.E. 302 (4)____
M.E. 308 (3)____
M.E. 313 (3)____
M.E. 321 (3)____
M.E. 334 (3)____
M.E. 403 (3)____

*Designates only grades of "C" or better may be used
to fulfill this requirement, with the exception of ES 101.

B. Complete a Technical elective engineering
course at the 400-level or above:

C. Complete the following: Must earn a "C" grade
or better in ES 331, ES 341 and ES 346:- (3)

D. Complete 2 elective credits:

E. Complete the Fundamental Engineering
Exam:__________

Note: Students electing to complete the
aerospace engineering concentration must complete
the following as part of their program requirements
("C" or better grades) and complete a senior design
project that is related to aerospace engineering:

Note: Students electing to complete the
petroleum engineering concentration must complete
the following as part of their program requirements
("C" or better grades) and complete a senior design
project that is related to petroleum engineering:

Credits for core/general requirements:  58
Credits required for major:  71
Elective credits:  2
Total credits required for degree  131
Fall Semester - 16 credits
ENGL 111X - Intro to Academic Writing (3)
MATH 200X - Calculus I (4)
ES 101 - Introduction to Engineering (3)
CHEM 105X - General Chemistry I (4)
Perspectives on the Human Condition (3)

Fall Semester - 17 credits
PHYS 211X - General Physics (4)
MATH 202X - Calculus III (4)
ES 209 - Statics (3) (ES 101, MATH 201; coreq PHYS 211)
ME 321 - Industrial Processes (3)
ENGL 211X/213X Academic Writing about Lit or Soc/Nat Sciences (3)

Fall Semester - 16 credits
ES 307 - Elem. of Electrical Eng. (3) (MATH 202)
ES 301 - Engineering Analysis (3) (MATH 302, ES 210)
ES 331 - Mech. of Materials (3) (ES 208 or 209 and MATH 201)
ME 302 - Mechanical Design I (4) (ES 208 or 210)
Perspectives on the Human Condition (3)

Fall Semester - 17 credits
ME 408 - Dynamics of Systems (3) (ES 201, 301)
ME 441 - Heat and Mass Transfer (3) (ES 346, 341)
ME Elective (3)
Technical Elective (3)
ESM 450W - Econ. Analysis and Ops. (3) (ES 201 and senior)
Elective (2)

Fall Semester - 12 credits
ENGL 111X - Intro to Academic Writing (3)
MATH 200X - Calculus I (4)
ES 101 - Introduction to Engineering (2)
Perspectives on the Human Condition (3)

Fall Semester - 14 credits
PHYS 211X - General Physics I (4)
MATH 202X - Calculus III (4)
ES 209 - Statics (3) (ES 101 and MATH 201; coreq PHYS 211).
ENGL 211X/213X Academic Writing about Lit or Soc/Nat Sciences (3)

Fall Semester - 13 credits
CHEM 105X - General Chemistry (4)
ES 301 - Engineering Analysis (3) (MATH 302, ES 210)
ES 331 - Mechanics of Materials (3) (ES 208 or 209 and MATH 201)
Perspectives on the Human Condition (3)

Fall Semester - 13 credits
ES 307 - Elements of Electrical Engineering (3) (MATH 202)
ES 341 - Fluid Mechanics (4) (MATH 201 and ES 208 or 210)
ME 408 - Dynamics of Systems (3) (ES 201, 301)
Perspectives on the Human Condition (3)

Fall Semester - 14 credits
ME 441 - Heat and Mass Transfer (3) (ES 346, 341)
ME Elective (3)
Technical Elective (3)
ESM 450W - Econ. Analysis and Operations (3) (ES 201 and senior)
Elective (2)

Spring Semester - 17 credits
COMM 131X or 141X (3)
MATH 201X - Calculus II (4)
ES 201 - Computer Tech. (3) (MATH 107 and 108 or enroll MATH 200)
CHEM 106X - General Chemistry II (4)
Perspectives on the Human Condition (3)

Spring Semester - 16 credits
PHYS 212X - General Physics (4)
MATH 302 - Differential Equations (3) (MATH 202)
ES 210 - Dynamics (3) (ES 209)
ES 346 - Thermodynamics (3) (MATH 201 and PHYS 211)
Perspectives on the Human Condition (3)

Spring Semester - 15 credits
ME 313 - Mech. Engr. Thermodyn. (3) (ES 341, 346)
ME 334 - Elem. of Material Science Engr (3) (Chem 106 and PHYS 212)
ME 308 - Instrumentation and Measurement (3) (ES 307)
ES 341 - Fluid Mechanics (4) (MATH 201 and ES 208 or 210)
Perspectives on the Human Condition (3)

Spring Semester - 14 credits
CHEM 106X - General Chemistry (4)
ES 346 - Thermodynamics (3) (MATH 201 and PHYS 211)
ME 302 - Mechanical Design I (4) (ES 208 or 210)
Perspectives on the Human Condition (3)

Spring Semester - 12 credits
ME 313 - Mech. Engr. Thermodyn. (3) (ES 341, 346)
ME 334 - Elem. of Material Science Engr (3) (Chem 106 and PHYS 212)
ME 308 - Instrumentation and Measurement (3) (ES 307)
ME 403 - Mechanical Design II (3) (ME 302, ES 331)
ME 415W - Thermal Systems Lab (3) (ME 313, ME 441)
ME 487W,O - Design Project (3)
ME Elective (3)
Perspectives on the Human Condition (3)

Notes
1. The semester-by-semester breakdown is a suggestion only. You should consult with your advisor to work out a schedule.
2. Prerequisites for certain courses are listed in parentheses at the end. You should consult the catalog for additional details.
3. All ME required courses are offered once a year.
4. All ES courses are usually offered every semester with the exception of ES 307 (Fall).
5. ESM 450W is usually offered every semester.

(8/19/2008)