

diversity. If you complete either MUSC 110, MUSC 117 or DANC 110 under Distributive Studies, these courses would also fulfill your diversity requirement. In addition, there are a number of 300-400 level courses that can be taken to fulfill both the Advanced Studies and Diversity requirement. Please consult with your advisor for a listing of approved courses.

- To be granted advanced placement credit for a course, you must meet UM,CP's minimum requirements. These differ from FSU's standards, with a higher score required by UM,CP in a number of areas. Please consult the Engineering Coordinator to verify AP scores required to receive credit.
- Advanced Studies courses should be taken only after completing 56 credits/entering junior standing.

2. Mathematics and Natural Sciences (10 hours)

The mathematics and sciences requirements are fulfilled by courses completed for the engineering program.

3. Social Sciences (9 hours)

HIST 100/111 The Contemporary World in Historical Perspective
and two behavioral and social science courses from the following:
POSC 110/112 Introduction to American Politics
POSC 113/114 Introduction to World Politics
ECON 200 Basic Economics or ECON 201/211 Princ. of Econ.
GEOG 104/114 Human Geography
PSYC 150/151 General Psychology
SOC 100/111 Introduction to Sociology

Advanced Studies Requirements

Two courses (6 credits) required:

Must be 300-400 level courses taken after 56 credits. Students may substitute an approved senior capstone course in their major taken after 86 credits for one of the two required Advanced Studies courses. The other course **must** be outside the major. The following may not be used to fulfill Advanced Studies requirements:

- Professional Writing courses
- Courses used to meet Distributive Studies requirements
- Internships or other experiential learning types of courses
- Courses taken on a pass/fail basis

One independent studies course (*minimum of three credits, outside the major*) may be used toward Advanced Studies requirements as long as it is consistent with the rules above and approved by the Engineering Coordinator.

Summary of Pre-Engineering Requirements

1. Engineering Science Courses (12 hours)

ENES 100 Introduction to Engineering Design
ENES 102 Statics
ENES 220 Mechanics of Materials
ENES 221 Dynamics

2. Required Courses in Other Departments (40 hours)

CHEM 133 General Chemistry for Engineers (*preferred*)
or CHEM 202 General Chemistry II
CHEM 201 General Chemistry I (*Meets GEP requirement*)
ENGL 101 Freshman Composition (*Meets GEP requirement*)
ENGL 339 Scientific Writing or ENGL 338 Technical Writing
(*Meets GEP requirement*)
MATH 236 Calculus I (*Meets GEP requirement*)
MATH 237 Calculus II
MATH 238 Calculus III
MATH 432 Differential Equations
PHYS 261 Principles of Physics I: Mechanics (*Meets GEP requirement*)
PHYS 262 Principles of Physics II: Electricity and Magnetism
PHYS 263 Principles of Physics III: Sound and Light

Summary of Engineering Requirements

1. Required Engineering Courses (36 hours)

ENME 232 Thermodynamics
ENME 350 Electronics and Instrumentation I
ENME 271 Numerical Methods in Mechanical Engineering
ENME 331 Fluid Mechanics
ENME 332 Transfer Processes
ENME 351 Electronics and Instrumentation II
ENME 361 Vibration, Controls and Optimization I
ENME 371 Product Engineering and Manufacturing
ENME 462 Vibration, Controls and Optimization II
ENME 382 Engineering Materials and Manufacturing Processes
ENME 392 Statistical Methods for Product and
Process Development
ENME 472 Integrated Product and Process Development
(*Capstone*)

2. Elective Hours in Department (18 hours)