Student Name	
CWID	

THE UNIVERSITY OF ALABAMA
Curriculum for Mechanical Engineering

Fall 2012

128 Semester Hours

Freshman Year — 31

15 Credit Hours

- **CH 101** General Chemistry 1 *Lab Included* — 4
- **ENGR 111** Engineering the Future — 1
- **MATH 125** Calculus 1 — 4
- **ME 121** Introduction to Mechanical Engineering — 1
- **ENGR 131** Engineering Concepts 1 — 1
- **ENGR 151** Fundamental Graphics — 1
- **EN 101** English Composition 1 — 3

16 Credit Hours

- Social and Behavioral Sciences — 3
- **PH 105** General Physics with Calculus 1 *Lab Included* — 4
- **MATH 126** Calculus 2 — 4
- **ENGR 141** Engineering Concepts 2 — 1
- **ENGR 161** Engineering Graphics — 1
- **EN 102** English Composition 2 — 3

Sophomore Year — 64

18 Credit Hours

- Approved Science Elective — 4
- **PH 106** General Physics with Calculus 2 *Lab Included* — 4
- **MATH 227** Calculus 3 — 4
- **AEM 201** Statics — 3
- **ME 215** Thermodynamics 1 — 3

15 Credit Hours

- **MTE 271** Engineering Materials 1 — 3
- **MATH 238** Applied Differential Equations 1 — 3
- **AEM 264** Dynamics — 3
- **AEM 311** Fluid Mechanics — 3
- **ME 305** Thermodynamics 2 — 3

Junior Year — 95

16 Credit Hours

- **AEM 250** Mechanics of Materials 1 — 3
- **AEM 251** Mechanics of Materials *Lab* — 1
- Humanities — 3
- **ECE 320** Fundamentals of Electrical Engineering — 3
- **ME 349** Engineering Analysis — 3
  - Computer Core Course
- **ME 309** Heat Transfer — 3

15 Credit Hours

- **ME 383** Modern Manufacturing Practices — 3
- **ME 350** Static Machine Components — 3
- **ME 360** Control and Instrumentation Components *Lab Included* — 3
  - Writing Core Course
- **ME 372** Dynamic Systems — 3
  - Computer Core Course
- Mechanical Engineering — 3

Senior Year — 128

18 Credit Hours

- **ME 489** Mechanical Engineering Design 1 *& Projects Lab* — 3
  - Students must be within 33 hours of graduation
- **ME 450** Dynamic Machine Components — 3
- **ME 460** Thermal Systems Instrumentation *Lab Included* — 3
  - Writing Core Course
- **ME 415** Energy Systems Design — 2
  - OR
  - **ME 407** HVAC — 3
- Social and Behavioral Sciences — 3
- Humanities — 3

15 Credit Hours

- **ME 490** Mechanical Engineering Design 2 *& Projects Lab* — 3
- Mechanical Engineering — 3
- **Technical Elective** — 3
  - Any M.E. elective or 300-400 level Engineering, Math, or Science course by advanced petition.
- Optional elective for students enrolled in ME 415
- Social and Behavioral Sciences — 3
- Humanities — 3

All 4 of these courses are required, and must include one 2-course In-Depth Study series.

✸ Prerequisites not shown

→ Prerequisite

⇢ Corequisite

Shape Key: Required Course (Credit Hours) / Elective

Color Key: Engineering; Natural Science; Humanities; Mathematics; Freshman Composition; Social and Behavioral Sciences

Updated 10/24/2012