# Material Science Engineering

## Four Year Plan (2016-2017 Catalog, ready for calculus)

### FALL SEMESTER | SPRING SEMESTER
---|---
UF 100 Intellectual Foundations | ENGL 101 Introduction to College Writing
CHEM 111, 111L General Chemistry I with Lab | CHEM 112, 112L General Chemistry II with Lab
MATH 170 Calculus I | MATH 175 Calculus II
ENGR 120 or ENGR 130 Introduction to Engineering | PHYS 211, 211L Physics I with Calculus and Lab
**SEMESTER TOTAL** | **SEMESTER TOTAL**
14+ | 16

### SECOND YEAR

### FALL SEMESTER | SPRING SEMESTER
---|---
MATH 275 Multivariable and Vector Calculus | MATH 333 Differential Equations
PHYS 212, 212L Physics II with Calculus and Lab | UF 200 Civic and Ethical Foundations
MSE 245 Introduction to MSE | DLL, DLV, or DLS course
ENGL 102 College Writing and Research | MSE 246 Materials for Society (CID)
**SEMESTER TOTAL** | **SEMESTER TOTAL**
15 | 17

### THIRD YEAR

### FALL SEMESTER | SPRING SEMESTER
---|---
MSE 308 Thermodynamics of Materials | MSE 318 Phase Transformations and Kinetics
MSE 312 Mechanical Behavior of Materials | MSE 381 Materials Analysis Laboratory
MSE 380 Materials Properties Laboratory | MSE 321 Structural Characterization
ENGR 210 Statics | PHYS 309, 309L Modern Physics with Lab
MATH 360 Engineering Statistics | Technical emphasis elective
**SEMESTER TOTAL** | **SEMESTER TOTAL**
15 | 16

### FALL SEMESTER | SPRING SEMESTER
---|---
MSE 415 Materials Processing (or 410) | MSE 410 Electrical Properties of Materials (or 415)
MSE 480 Senior Project | (FF) MSE 482 Senior Project II
MSE 498 Materials Science Seminar | Technical emphasis elective
ENGR 240 or ECE 210 Electrical Circuits | DLL, DLV, or DLS course
Technical emphasis elective | DLL, DLV, or DLS course
DLL, DLV, or DLS course | DLL, DLV, or DLS course
**SEMESTER TOTAL** | **SEMESTER TOTAL**
16 | 15

**HIGHLIGHTED COURSES** are offered only in the semester in which they are listed.

**DISCIPLINARY LENS COURSES:** Students need to take one DLL, one DLV, and two DLS courses. DLS courses must come from two different fields.

**TECHNICAL EMPHASIS:** Students must complete 9 credits of technical emphasis – courses that are related to one another and which support the student’s MSE degree. The emphasis area and courses must be pre-approved by the advisor.

**GRADE POLICY:** A C- or above is required for all prerequisite courses and for all upper division courses within the student’s major.

### MSE UNDERGRADUATE ADVISORS:

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