### Senior Year

**First Semester**
- 3 - MSE 4580 Surface Phenomena in Materials Science and Engineering
- 1 - MSE 4600 Surface Phenomena in Materials Science and Engineering Laboratory
- 3 - MSE 4610 Polymer and Fiber Science III
- 3 - MSE 4910 Undergraduate Research
- Technical Requirement

**Second Semester**
- 3 - MSE 4070 Senior Capstone Design
- 1 - MSE 4450 Practice of Materials Engineering
- 3 - MSE 4570 Color Science
- 1 - MSE 4590 Color Science Laboratory
- 3 - Arts and Humanities Requirement or Social Science Requirement
- Technical Requirement

### Second Semester

**First Semester**
- 3 - MSE 4910 Undergraduate Research
- 3 - MSE 4610 Polymer and Fiber Science III
- 3 - ME 3060 Fundamentals of Machine Design
- 3 - ME 3120 Manufacturing Processes and Their App
- 2 - ME 3330 Mechanical Engineering Lab. II or Statistics Requirement

**Second Semester**
- 3 - ME 3040 Heat Transfer
- 3 - ME 3050 Model, and Analysis of Dynamic Syst.
- 3 - ME 3060 Fundamentals of Machine Design
- 3 - ME 3120 Manufacturing Processes and Their App
- 2 - ME 3330 Mechanical Engineering Lab. II or Statistics Requirement

### Freshman Year

**First Semester**
- 4 - CH 1010 General Chemistry
- 3 - ENGL 1030 Composition and Rhetoric
- 2 - ENGR 1020 Engineering Disciplines and Skills
- 4 - MATH 1060 Calculus of One Variable I
- 3 - Arts and Humanities (Non-Lit.) Requirement or Social Science Requirement

**Second Semester**
- 3 - ENGR 1410 Programming and Problem Solving
- 2 - ENGR 2080 Engineering Graphics and Machine Design
- 4 - MATH 1080 Calculus of One Variable II
- 1 - PHYS 1220 Physics with Calculus I
- 1 - PHYS 1240 Physics Lab. I
- 3 - Arts and Humanities (Lit.) Requirement or Social Science Requirement

### Sophomore Year

**First Semester**
- 1 - ME 2000 Sophomore Seminar
- 2 - ME 2220 Mechanical Engineering Lab. I or M
- 3 - MSE 2100 Intro. to Materials Science
- 4 - MATH 2060 Calculus of Several Variables
- 3 - PHYS 2210 Physics with Calculus II

**Second Semester**
- 2 - ECE 2070 Basic Electrical Engineering
- 1 - ECE 2080 Basic Electrical Engineering Lab.
- 3 - ME 2030 Found. of Thermal and Fluid Systems
- 3 - ME 2040 Mechanics of Materials
- 2 - ME 2220 Mechanical Engineering Lab. I or M
- 3 - MSE 2100 Intro. to Materials Science
- 4 - MATH 2080 Intro. to Ordinary Diff. Equations

### Junior Year

**First Semester**
- 3 - ENGL 3140 Technical Writing
- 3 - ME 3030 Thermodynamics
- 3 - ME 3070 Foundations of Mechanical Systems
- 3 - ME 3080 Fluid Mechanics
- 3 - ME 3330 Mechanical Engineering Lab. II or Statistics Requirement
- 3 - MATH 3650 Numerical Methods for Engineers

### Second Semester

**First Semester**
- 3 - ME 3040 Heat Transfer
- 3 - ME 3050 Model, and Analysis of Dynamic Syst.
- 3 - ME 3060 Fundamentals of Machine Design
- 3 - ME 3120 Manufacturing Processes and Their App
- 2 - ME 3330 Mechanical Engineering Lab. II or Statistics Requirement

**Second Semester**
- 3 - ME 4030 Mechanical Engineering Design
- 3 - ME 4030 Control and Integration of Multi-Domain Dynamic Systems
- 2 - ME 4440 Mechanical Engineering Lab. III or Technical Requirement
- 3 - Mechanical Engineering Professional Req.
- 3 - Mechanical Engineering Technical Requirement

### Notes:
1. Enrollment Policy (see website for Complete Statement of Department Policy): A student is allowed to enroll in any ME course only when all prerequisites, as defined by current official listings for that course, have been passed with a grade of C or higher.
2. No student may exceed three attempts to complete successfully. Registration for a third attempt to complete one of these ME courses requires the approval of the undergraduate coordinator in the Department of Mechanical Engineering. A grade of C counts as an unsuccessful attempt at completing the course.
3. For students repeating an ME course, registration preference will be given to students in a degree-granting engineering major whose curriculum requires the course in question.
4. To change majors into the Mechanical Engineering degree program, students must have a minimum cumulative grade-point average of 2.60 or higher at Clemson and earned a C or better in each course in the General Engineering freshman curriculum, EXCLUDING the Arts and Humanities/Social Science requirements.
5. In addition to other institutional requirements for graduation, candidates for a BS degree in Mechanical Engineering are required to have a 2.00 or higher cumulative GPA in all engineering courses taken at Clemson University.
6. Students whose cumulative grade-point average is 2.0 or lower are placed on a provisional status and will have restricted enrollment in classes.
7. No student may exceed three attempts to complete successfully. Registration for a third attempt to complete one of these ME courses requires the approval of the undergraduate coordinator in the Department of Mechanical Engineering. A grade of C counts as an unsuccessful attempt at completing the course.
8. See Policy on Humanities and Social Sciences for Engineering Curricula. Six of these credits must also satisfy the Cross-Cultural Awareness and Science and Technology in Society General Education requirements.
9. Students whose cumulative grade-point average is 2.60 or higher at Clemson and earned a C or higher.
10. See Policy on Humanities and Social Sciences for Engineering Curricula. Six of these credits must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements. These requirements may be filled in any order.
11. Both are required but may be taken in either semester.
12. ROTC students only may substitute the AS or ML series of courses.
13. Select from 3000-4000-level courses in BCHM, BE, BICE, BMOL, BMOL, CE, CH, CHE, ECE, EES, FIN, GEOL, IE, LAW, MATH, ME, MGT, MSCI, MTK, MSE, PHYS, PKSC.
14. At least three credits must be selected from BE, BICE, BMOL, CE, CHE, ECE, EES, IE, ME or MSE courses.