

DEPARTMENT OF MECHANICAL ENGINEERING
BACHELOR OF SCIENCE DEGREE IN MECHANICAL ENGINEERING
(2014 Curriculum)

FRESHMAN YEAR

First Semester	Crs	Second Semester	Crs
ENGR 1050 Engineering Discipline and Skills I	1	ENGR 2080 Engr. Graphics with Computer Applications	2
ENGR 1060 Engineering Discipline and Skills II	1	ENGR 1070 Programming and Problem Solving I	1
CH 1010 General Chemistry	4	ENGR 1080 Programming and Problem Solving II	1
ENGL 1030 Accelerated Composition	3	ENGR 1090 Programming and Problem Applications	1
MATH 1060 Calculus of One Variable I	4	MATH 1080 Calculus of One Variable II	4
Arts/Hum/SS Requirement ¹ (NLH)	3	PHYS 1220 Physics with Calculus I	3
		PHYS 1240 Physics Laboratory I	1
		Arts/Hum/SS Requirement ¹ (Lit)	3
	16		16

SOPHOMORE YEAR

First Semester	Crs	Second Semester	Crs
ME 2000 Sophomore Seminar	1	ME 2040 Mechanics of Materials	3
ME 2010 Statics & Dynamics for Mech. Engr	5	ME 2030 Foundations of Therm & Fluid Sys	3
MATH 2060 Calculus of Several Variables	4	MATH 2080 Intro to Ord Differential Eqns.	4
PHYS 2210 Physics with Calculus II	3	ECE 2070 Basic Electrical Engineering	2
Option: ²		ECE 2080 Electrical Engineering Lab. I	1
MSE 2100 Introduction to Materials Science or	3 or 2	Option: ²	
ME 2220 Mechanical Engineering Lab		ME 2220 Mechanical Engineering Lab 1 or	2 or 3
		MSE 2100 Introduction to Materials Science	
	16/15		15/16

JUNIOR YEAR

First Semester	Crs	Second Semester	Crs
ME 3070 Foundations of Mechanical Systems	3	ME 3040 Heat Transfer	3
ME 3080 Fluid Mechanics	3	ME 3050 Model. and Analysis of Dynamic Systems	3
ME 3030 Thermodynamics	3	ME 3060 Fundamentals of Machine Design	3
MATH 3650 Intro to Numerical Analysis	3	ME 3120 Mfg Processes and Their Application	3
ENGL 3140 Technical Writing	3	Option: ²	
Option: ²		Statistics Requirement ³ or	3 or 2
ME 3330 Mechanical Engineering Lab. II or	2 or 3	ME 3330 Mechanical Engineering Lab. II	
Statistics Requirement ³			
	17/18		15/14

SENIOR YEAR

First Semester	Crs	Second Semester	Crs
ME 4010 Mechanical Engineering Design	3	ME 4000 Senior Seminar	1
ME Technical Requirement 1 ⁴	3	ME 4020 Internship in Engineering Design	3
Arts/Hum/SS Requirement ¹ (SS)	3	ME Technical Requirement 2 ⁴	3
ME 4030 Control & Integr Multidomain Dyn Sys.	3	Arts/Hum/SS Requirement ¹ (x2) (SS, Engr 5th)	6
Option: ²		Option: ²	
ME 4440 Mechanical Engineering Lab. III or	2 or 3	Technical Requirement 3 ⁴	3 or 2
Technical Requirement 3 ⁴		ME 4440 Mechanical Engineering Lab. III or	
	14/15		16/15

TOTAL CURRICULUM HOURS 125

¹ See Policy on Humanities and Social Sciences for Engineering Curricula. Six of these credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements. These requirements can be filled in any order.

² Both courses must be taken but they can be taken in either semester

³ Select from MATH 3020 or STAT 4110

⁴ See Advisor. Select from Department-approved list.

Enrollment Policy (See Web Site for Complete Statement of Departmental Policy): A student is allowed to enroll in any ME course only when all prerequisites, as defined by the current official listings for that courses, have been passed with a grade of C or higher.

No student may exceed three attempts to complete successfully ME 2010, ME 2030, or ME 2040. Registration for a third attempt to complete one of these courses requires the approval of the Undergraduate Coordinator in the Department of Mechanical Engineering. A grade of W counts as an unsuccessful attempt at completing a course.

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.

To change majors into the Mechanical Engineering degree program, students must have a minimum cumulative grade-point ratio 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