DEPARTMENT OF MECHANICAL ENGINEERING
BACHELOR OF SCIENCE DEGREE IN MECHANICAL ENGINEERING
(2017 Curriculum)

FRESHMAN YEAR

First Semester	CH	Second Semester	CH
ENGR 1050 Engineering Discipline & Skills I	1	ENGR 2080 Engr. Graphics w/ Computer Apps	2
ENGR 1060 Engineering Discipline & Skills II	1	ENGR 1070 Programming & Problem Solving I	1
CH 1010 General Chemistry	4	ENGR 1080 Programming & Problem Solving II	1
ENGL 1030 Accelerated Composition	3	ENGR 1090 Programming & Problems Applications	1
MATH 1060 Calculus of One Variable I	4	MATH 1080 Calculus of One Variable II	4
Arts/Humanities/Soc. Sci. Requirement[1]	3	PHYS 1220 Physics w/ Calculus I	3
		PHYS 1240 Physics Laboratory I	1
		Arts/Humanities/Soc. Sci. Requirement[1]	3
	16		16

SOPHOMORE YEAR

First Semester	CH	Second Semester	CH
ME 2000 Sophomore Seminar	1	ME 2040 Mechanics of Materials	3
ME 2010 Statics & Dynamics for Mech. Engr.	5	ME 2030 Foundations of Thermal & Fluid Sys	3
MATH 2060 Calculus of Several Variables	4	MATH 2080 Intro to Ordinary Diff EQs	4
PHYS 2210 Physics with Calculus II	3	Option:[3]	
Option:[2]	3 or 2	A. ME 2220 Mechanical Engineering Lab and Statistics Requirement[4] or	2+3 **or**
A. MSE 2100 Intro. to Materials Science or			
B. ME 2220 Mechanical Engineering Lab I		B. MSE 2100 Intro. to Materials Science and ECE 2070/2080 Basic Electrical Engr. & Lab	3+2+1
	16/15		15/16

JUNIOR YEAR

First Semester	CH	Second Semester	CH
ME 3070 Foundations of Mechanical Systems	3	ME 3040 Heat Transfer	3
ME 3080 Fluid Mechanics	3	ME 3050 Modeling & Analysis of Dynamic Sys	3
ME 3030 Thermodynamics	3	ME 3060 Fundamentals of Machine Design	3
MATH 3650 Numerical Methods for Engineers	3	ME 3120 Mfg. Processes & Their Application	3
ENGL 3140 Technical Writing	3	Option:[2]	2 or 3
Option:[2]	3 or 2	A. ME 3330 Mechanical Engineering Lab II or	
A. ECE 2070/2080 Basic EE/Basic EE Lab or		B. Statistics Requirement[4]	
B. ME 3330 Mechanical Engineering Lab II			
	18/17		14/15

SENIOR YEAR

First Semester	CH	Second Semester	CH
ME 4010 Mechanical Engineering Design	3	ME 4000 Senior Seminar	1
ME Technical Elective I[5]	3	ME 4020 Internship in Engineering Design	3
ME 4030 Control & Integr. of Multi-domain Sys.	3	ME Technical Elective II[5]	3
Arts/Humanities/Soc. Sci. Requirement[1]	3	Professional Requirement[6]	3
Option:[2]	3 or 2	Arts/Humanities/Soc. Sci. Requirement[1]	3
A. Technical Elective III or		Option:[2]	2 or 3
B. ME 4440 Mechanical Engineering Lab III		A. ME 4440 Mechanical Engineering Lab II or	
		B. Technical Elective III[7]	
	15/14		15/16

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 (CCA) and Science and Technology in Society requirements. These requirements can be filled in any order.

[2] Both courses must be taken, but each can be taken in either semester.

[3] Taking ECE 2070/2080 concurrently with ME 2220 is not recommended, as the combination requires a total of 8 contact hours in lab per week. If MSE 2100 is taken in first semester of sophomore year (Option A), ECE 2070/2080 can be delayed to first semester of junior year without getting behind in ME curriculum.

[4] Select from MATH 3020 or STAT 4110

[5] See Department-approved list in Clemson Undergraduate Catalog

[6] Select any course that meets the technical requirement (any course listed in footnote 7 or 9); or any 3000- or 4000-level modern language course; or a minor requirement.

[7] See Department-approved list in Clemson Undergraduate Catalog