



Approved 17 Feb 2016 by Prof. Frampton

Semester 1	Course	Hrs
CHEM 1601, 1601L (102A, 104A)	General Chemistry	4
ES 1401, 2, 3 (140A, B, C)	Intro to Engineering	3
MATH 1300 (155A)	Acc Single-Var Calculus I	4
	LAC	3
	Vanderbilt Visions	0
	total hours	14

Semester 2	Course	Hrs
CS 1101 or 1103 (101 or 103)	Programming	3
MSE 1500, 1500L (150, 150L)	Materials Science I	4
MATH 1301 (155B)	Acc Single-Var Calculus II	4
PHYS 1601, 1601L (116A, 118A)	General Physics I	4
	total hours	15

Semester 3	Course	Hrs
CE 2200 (180)	Statics	3
	LAC	3
MATH 2300 (175)	Multivariable Calculus	3
ME 2160 (160)	Intro to ME Design	3
PHYS 1602, 1602L (116B, 118B)	General Physics II & Lab	4
	total hours	16

Semester 4	Course	Hrs
CE 2205 (182)	Mechanics of Materials	3
EECE 2112 (112)	Circuits I	3
MATH 2420 (198)	Methods of Ord Diff Eqs	3
	Math elective	3
ME 2171 (171)	Instrumentation Lab	2
ME 2190 (190)	Dynamics	3
	total hours	17

Semester 5	at IES Madrid/UC3M	Hrs
UC3M-15329	Fluid Mechanics* <i>see note below</i> (3 hrs CE 203 for ME 3224; 1 hr open elective)	4
UC3M-14198	Machine Theory (3 hrs ME 3202; 1 hr open elective)	4
	LAC-IES Madrid elective	4
	LAC-IES Madrid Spanish class	4
	total hours	16

Semester 6	Course	Hrs
	LAC	1
ME 3204 (204)	Mechatronics	3
ME 2220 (220)	Thermodynamics	3
	ME elective	3
	technical elective	3
	technical elective	3
	total hours	16

Semester 7	Course	Hrs
	LAC	3
ME 4213 (213)	Energetics Laboratory	2
ME 3234 (234)	System Dynamics	4
ME 4950 (242)	Design Synthesis	2
ME 4959 (297)	Sr Engr Design Seminar	1
	ME elective	3
MSE 2205 (232)	Stre & Stru of Engr Mtls	1
	total hours	16

Semester 8	Course	Hrs
ME 3248 (248)	Heat Transfer	3
ME 4951 (243)	Eng Design Projects	3
	ME elective	3
	Technical elective	3
	Open elective	4
	total hours	16

Total hours = 126

***This UC3M course is very challenging and should only be taken by students with strong mathematical skills and ability to adapt well to European-style instruction.**

This curriculum plan is a guide that follows the ME degree requirements as of fall 2015. It is NOT authoritative. The Undergraduate Catalog is the authoritative document regarding degree requirements. Students considering studying abroad should consult the catalog and discuss their plans with their academic advisers.