

UNIVERSITY OF MIAMI
COLLEGE OF ENGINEERING
BACHELOR OF SCIENCE IN ENGINEERING SCIENCE
123-124 Credits
2012 - 2013

Freshman Year:					
MAE 111	Introduction to Engineering I	3	MAE 112	Introduction to Engineering II	2
ENG 105	English Composition I	3	ENG 107	Writing About Science	3
MTH 151	Calculus I for Engineers	5	MTH 162	Calculus II	4
PHY 205	University Physics I	3	PHY 206	University Physics II	3
			PHY 208	University Physics II Lab	1
			CAE 210	Mechanics of Solids I	3
		Total	14		
				Total	16

Sophomore Year:					
MAE 207	Mechanics of Solids II	3	EEN 201	Electrical Circuit Theory	3
CHM 111	Principles of Chemistry I	3	MAE 202	Dynamics	3
CHM 113	Chemistry Laboratory I	1	CHM 112	Principles of Chemistry II	3
MTH 210	Introduction to Linear Algebra	3	CHM 114	Chemistry Laboratory II	1
PHY 207	University Physics III	3	MTH 310	Multivariable Calculus	3
PHY 209	University Physics III Lab	1		Humanities and Arts Elective*	3
	People and Society Elective*	3			
		Total	17		
				Total	16

Junior Year:					
IEN 311	Applied Probability & Statistics	3	EEN 204	Electrical Circuits Laboratory	1
MAE 303	Thermodynamics I	3	MAE 241	Measurements Laboratory	3
MTH 311	Ordinary Differential Equations	3	MAE 301	Engineering Materials Science	3
PHY 350	Intermediate Electricity and Magnetism	3	MAE 309	Fluid Mechanics	3
	People and Society Elective*	3	CHM 201	Organic Chemistry I (Lecture)	3
				Humanities and Arts Elective*	3
		Total	15		
				Total	16

Senior Year:					
MAE 302	Mechanical Behavior of Materials	3	EEN 305	Electronics I	3
MAE 412	System Dynamics	3	PHY 351	Intermediate Electricity and Magnetism II	3
			CHM202	Organic Chemistry II (Lecture)	3
			CHM205	& Organic Chemistry I (Lab)	1
CHM 360	Physical Chemistry I(Lecture)	3		Applied Elective***	3
PHY 360	Introduction to Modern Physics	3		Technical Elective**	3
	Advanced PS/HA Elective*	3		Advanced PS/HA Elective*	3
		Total	15		
				Total	15

* People and Society/Humanities and Arts are selected from the appropriate table found in the Bulletin in the College of Engineering section.

**Technical Electives are advanced courses in mathematics, science or engineering, approved by the Faculty Advisor.

***Applied electives are advanced courses selected in coordination with the Faculty Advisor and require his/her approval.