

UNIVERSITY OF MIAMI
DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING
BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING
ELECTRICAL ENGINEERING OPTION

127 Credits
2015 - 2016

Freshman Year:					
ECE 111	Introduction to Engineering I	3	ECE 112	Introduction to Engineering II	2
ENG 105	English Composition I	3	ECE 118	Intro. To Programming	3
MTH 151	Calculus I for Engineers	5	ENG 107	Writing About Science	3
PHY 205	University Physics I	3	MTH 162	Calculus II	4
			PHY 206	University Physics II	3
			PHY 208	University Physics II Lab	1
Total			Total		
14			16		

Sophomore Year:					
ECE 201	Electrical Circuit Theory	3	ECE 204	Electrical Circuits Laboratory	1
ECE 218	Data Structures	3	ECE 304	Logic Design	3
MTH 311	Ordinary Differential Equations	3	ECE 305	Electronics I	3
PHY 207	University Physics III	3	ECE 307	Circuits, Signals and Systems	3
PHY 209	University Physics Lab III	1	MTH 210	Introduction to Linear Algebra	3
	Humanities and Arts Cognate*	3	CHM 151	Chemistry for Engineers I	3
			CHM 153	Chemistry Lab for Engineers	1
Total			Total		
16			17		

Junior Year:					
ECE 301	Electromagnetic Field Theory	3	ECE 312	Processors: Hardware, Software and Interfacing	4
ECE 306	Electronics II	3	ECE 316	Structured Digital Design	1
ECE 311	Electronics Lab	1		EE Core Elective ⁺	3
ECE 315	Digital Design Laboratory	1		EE Core Elective ⁺	3
ECE 336	Discrete-Time Signals and Systems	3		ECE Elective ⁺	3
IEN/ECE 310	Engineering Probability	3		People and Society Cognate*	3
	People and Society Cognate*	3			
Total			Total		
17			17		

Senior Year:					
ECE 415	Senior Project I**	1	ECE 416	Senior Project II	2
	ECE Elective ⁺	3		Technical Elective ⁺	3
	ECE Elective ⁺	3		Technical Elective ⁺	3
	ECE Design Elective ⁺	3		Humanities and Arts Cognate *	3
	Technical Elective ⁺	3		People and Society Cognate*	3
	Humanities and Arts Cognate*	3			
Total			Total		
16			14		

* Students must complete a minimum of 1 PS cognate and 1 HA cognate, to be selected from the list of available cognates. Each cognate should be a minimum of 3 courses (minimum of 9 credits).

⁺ See description of electives under the Department Electives Section

** Offered only in the Fall semester