UNIVERSITY OF MIAMI
DEPARTMENT OF MECHANICAL AND AEROSPACE ENGINEERING
BACHELOR OF SCIENCE IN AEROSPACE ENGINEERING
126 Credits
2015 - 2016

Freshman Year:					
MAE 111	Introduction to Engineering I	3	MAE 112	Introduction to Engineering II	2
ENG 105	English Composition I	3	CAE 210	Mechanics of Solids I	3
MTH 151	Calculus I for Engineers	5	ENG 107	English Comp II: Science & Technology	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	**14**		***Total***	**16**

Sophomore Year:					
MAE 207	Mechanics of Solids II	3	MAE 202	Dynamics	3
IEN 311	Applied Probability & Statistics	3	MAE 241	Measurements Laboratory	3
MTH 211	Calculus III	3	CHM 151	Chemistry for Engineers I	3
PHY 207	University Physics III	3	CHM 153	Chemistry Lab for Engineers	1
PHY 209	University Physics III Lab	1	ECE 205	Principles of Electrical Engineering	3
	Humanities and Arts Cognate *	3		People and Society Cognate*	3
	Total	**16**		***Total***	**16**

Junior Year:					
MAE 302	Mechanical Behavior of Materials	3	MAE 310	Heat Transfer	3
MAE 303	Thermodynamics I	3	MAE 351	Mechanics Laboratory	2
MAE 309	Fluid Mechanics	3	MAE 371	Aerodynamics	3
MAE 341	Mechanical Design I	3	MAE 470	Introduction to Aerospace Structures	3
MTH 311	Ordinary Differential Equations	3		MAE Technical Elective**	3
	Humanities and Arts Cognate *	3		People and Society Cognate*	3
	Total	**18**		***Total***	**17**

Senior Year:					
MAE 570	Aero Propulsion	3	MAE 415	Automatic Control	3
MAE 404	Experimental Engineering Laboratory	2	MAE 445	Capstone Aerospace Design Project - II	2
MAE 471	Flight Dynamics	3		MAE Technical Elective**	3
MAE 472	Design of Aerospace Structures	3		Humanities and Arts Cognate *	3
MAE 444	Capstone Aerospace Design Project I	1		People and Society Cognate *	3
MAE 446	Aircraft Design	3			
	Total	**15**		***Total***	**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).

****** Technical Electives are advanced courses in mathematics, science or engineering, approved by the Faculty Advisor, as appropriate for individual objectives.