

**UNIVERSITY OF MIAMI**  
**DEPARTMENT OF MECHANICAL AND AEROSPACE ENGINEERING**  
**BACHELOR OF SCIENCE IN AEROSPACE ENGINEERING**

*126 Credits*  
*2013 - 2014*

<b>Freshman Year:</b>					
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
<b>Total</b>			<b>Total</b>		
<b>14</b>			<b>16</b>		

<b>Sophomore Year:</b>					
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	EEN 205	Principles of Electrical Engineering I	3
PHY 207	University Physics III	3	CHM 151	Chemistry for Engineers I	3
PHY 209	University Physics III Lab	1	CHM 153	Chemistry Lab for Engineers	1
	People and Society Cognate (PS Elective)*	3		Humanities and Arts Cognate (HA Elective)*	3
<b>Total</b>			<b>Total</b>		
<b>16</b>			<b>16</b>		

<b>Junior Year:</b>					
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
	People and Society Cognate (PS Elective)*	3		Humanities and Arts Cognate (HA Elective)*	3
<b>Total</b>			<b>Total</b>		
<b>18</b>			<b>17</b>		

<b>Senior Year:</b>					
MAE 404	Experimental Engineering Laboratory	2	MAE 415	Automatic Control	3
MAE 444	Capstone Aerospace Design Project - I	1	MAE 445	Capstone Aerospace Design Project - II	2
MAE 446	Aircraft Design	3		MAE Technical Elective**	3
MAE 471	Flight Dynamics	3		Humanities and Arts Cognate ( Adv. HA Elective)*	3
MAE 472	Design of Aerospace Structures	3		People and Society Cognate (Adv. PS Elective)*	3
MAE 570	Aero Propulsion	3			
<b>Total</b>			<b>Total</b>		
<b>15</b>			<b>14</b>		

\* 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).

\*\* MAE Technical Electives are selected from courses at the 300 level or above offered by the Department of Mechanical & Aerospace Engineering.