NAME: _____

UID: _____   __ **A.A.   __ A.S.   __ Post-Bac**

AEROSPACE ENGINEERING

GENERAL EDUCATION REQUIREMENTS			
Fundamental Studies			
Academic Writing (AW)	ENGL 101		3
Professional Writing (PW)	ENGL 39X		3
Oral Communication (OC)			3
Mathmatics (MA)	MATH 140		4
Analytic Reasoning (AR)	MATH 140		0
Distributive Studies			
History/Social Sciences (HS*)			3
History/Social Sciences (HS*)			3
Humanities (HU*)			3
Humanities (HU*)	ENEE/ENES 200		3
Natural Sciences No Lab (NS)	PHYS 161		3
Natural Sciences w/Lab (NL)	PHYS 260/261		4
Scholarship in Practice (SP*) in major	ENES 100		3
Scholarship in Practice (SP*) out of major			3
Big Question Courses			
Big Question (SCIS*)	ENEE/ENES 200		0
Big Question (SCIS*)			3
Diversity			
Understanding Plural Societies (UP*)			3
Understanding Plural Societies (UP*) OR			3
Cultural Competency (CC*)			

MAJOR REQUIREMENTS			
Basic Sciences			
CHEM 135-Chem Engr **or** 131 & 134 -Fund & Prin			3/3&1
PHYS 161 - General Physics I (NS)			0
PHYS 260 and PHYS 261 - Gen Physics II & Lab (NL)			0
PHYS 270 and PHYS 271 - Gen Physics III & Lab			3 & 1
MATH 140 - Calculus I (MA/AR)			0
MATH 141 - Calculus II			4
MATH 240 or MATH 461 - Linear Algebra			4 or 3
MATH 241 - Calculus III			4
MATH 246 - Differential Equations			3
Engineering Sciences			
ENES 100 - Intro to Eng Design (SP)			0
ENES 102 - Mechanics I			3
ENES 220 - Mechanics II			3
ENES232 - Thermodynamics			3

MAJOR REQUIREMENTS		
ENAE 100 - Aerospace Eng Profession		1
ENAE 200 - Aerospace Eng Profession II		1
ENAE 202 - Aerospace Computing		3
ENAE 283 - Intro to Aerospace Systems		3
ENAE 301 - Dynamics of Aero Systems		3
ENAE 311 - Aerodynamics I		3
ENAE 324 - Aerospace Structures		4
ENAE 362 - Aero Instrumentation & Exp.		3
ENAE 380 - Flight Software Systems		3
ENAE 423 - Vibration & Aeroelasticity		3
ENAE 432 - Control of Aero. Systems		3
ENAE 464 - Aerospace Eng Lab		3
ENAE 4XX** **or**		3
ENAE 398H - Honors Research**		1/1/1
ENES 200 or ENEE 200- Tech & Consequences (HU/IS)		0
Technical Requirements		
Technical Elective - 4XX**		3

Choose one of the following tracks:		
Aeronautical Track:		
ENAE 403 - Aircraft Flight Dynamics		3
ENAE 414 - Aerodynamics II		3
ENAE 455 - Aircraft Propulsion & Power		3
ENAE 481 - Principles of Aircraft Design		3
ENAE 482 - Aeronautical Systems Design		3
Astronautical Track:		
ENAE 404 - Space Flight Dynamics		3
ENAE 441 - Space Navigation & Guidance		3
ENAE 457 - Space Propulsion & Power		3
ENAE 483 - Princ. of Space Systems Design		3
ENAE 484 - Space Systems Design		3

Requirements for Graduation:
☐ Final 30 credits must be earned at UMD
☐ 15 of the final 30 credits must be earned at the 300-400 level
☐ 12 of the final 30 credits must be upper level major coursework
☐ A minimum 2.00 cumulative UM GPA and satisfactory completion of all degree requirements are required for graduation
☐ Students matriculating after Fall 2012 must have a 2.0 minimum GPA for all major requirements, minor requirements, and undergraduate certificate requiremen
(Major courses are defined as: departmental courses, basic sciences, engineering sciences, specified degree tracks, technical requirements/ electives and Professional Writing (PW)
☐ A minimum of 124 credits is required to earn the degree

* May satisfy more than one requirement. See www.gened.umd.edu

**See Aerospace Advisor for appropriate electives: www.aero.umd.edu

Aerospace Engineering Graduation Plan

Name:_____   **UID:**_____

Year 1	Fall				Spring		
Current Engineering Students: https://eng.umd.edu/services/academic-policies Prospective Engineering Students: https://lep.umd.edu/	*Course*	*Credit*	*Grade*		*Course*	*Credit*	*Grade*
	ENAE 100	1			ENAE 202	3	
	ENES 100 (SP)	3			ENES 102	3	
	MATH 140 (AR)	4			MATH 141	4	
	CHEM 135	3			PHYS 161 (NS)	3	
	ENGL 101 (AW)	3			ORAL COMM (OC)	3	
	Total	**14**			**Total**	**16**	

Year 2	Fall				Spring		
	Course	*Credit*	*Grade*		*Course*	*Credit*	*Grade*
	ENES 220	3			ENAE 200	1	
	ENAE 283	3			ENES 232	3	
	MATH 241	4			MATH 240 or MATH 461	4 or 3	
	PHYS 260 and PHYS 261 (NL)	3 & 1			MATH 246	3	
	ENES/ENEE 200 (HU/SCIS)	3			PHYS 270 and PHYS 271	3 & 1	
					Hist & Social Sciences(HS)*	3	
	Total	**17**			**Total**	**17 or 18**	

Year 3	Fall				Spring		
	Course	*Credit*	*Grade*		*Course*	*Credit*	*Grade*
	ENAE 301	3			ENAE 324	4	
	ENAE 311 or ENAE414**	3			ENAE 404 or ENAE 311***	3	
	ENAE 362	3			ENAE 432	3	
	ENAE 380	3			Professional Writing (PW)	3	
	Scholarship in Practice (SP)*	3			Hist & Social Sciences(HS)*	3	
	Total	**15**			**Total**	**16**	

Year 4	Fall				Spring		
	Course	*Credit*	*Grade*		*Course*	*Credit*	*Grade*
	ENAE 403 or ENAE 441	3			ENAE 464	3	
	ENAE 423	3			ENAE 482 or ENAE 484	3	
	ENAE 455 or ENAE 457	3			ENAE Elective	3	
	ENAE 481 or ENAE 483	3			Technical Elective	3	
	Humanities (HU)*	3			Gen Ed/Elective‡	3	
	Total	**15**			**Total**	**15**	

Plural Societies (UP) and Cultural Competence (CC) courses may also fulfill Distributive Studies categories.

**Select ENAE414 for Aero track, select ENAE311 for Astro track

***Select ENAE311 for Aero track, select ENAE404 for Astro track

‡Only necessary if student still needs to fulfill GenEd and/or needs to meet the 124 credit minimum.