

NAME: \_\_\_\_\_

# AEROSPACE ENGINEERING

UID: \_\_\_\_\_    A.A.    A.S.    Post-Bac

GENERAL EDUCATION REQUIREMENTS			
<b>Fundamental Studies</b>			
Academic Writing (AW)	ENGL 101		3
Professional Writing (PW)	ENGL 39X		3
Oral Communication (OC)			3
<b>Distributive Studies</b>			
History/Social Sciences (HS*)			3
History/Social Sciences (HS*)			3
Humanities (HU*)			3
Scholarship in Practice (SP*) out of major			3
<b>I-Series Courses</b>			
I-Series (IS*)			0/3
<b>Diversity</b>			
Understanding Plural Societies (UP*)			0/3
Understanding Plural Societies (UP*) OR Cultural Competency (CC*)			0/3
MAJOR REQUIREMENTS			
<b>Basic Sciences</b>			
CHEM 135-Chem Engr or 131 & 134 -Fund & Prin			3/3&1
PHYS 161 - General Physics I (NS)			3
PHYS 260 and PHYS 261 - Gen Physics II & Lab (NL)			3 & 1
PHYS 270 and PHYS 271 - Gen Physics III & Lab			3 & 1
MATH 140 - Calculus I (MA/AR)			4
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
<b>Engineering Sciences</b>			
ENES 100 - Intro to Eng Design (SP)			3
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)			3
<b>Technical Requirements</b>			
Technical Elective - 4XX**			3

Choose one of the following tracks:			
<b>Aeronautical Track:</b>			
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
<b>Astronautical Track:</b>			
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

\* May satisfy more than one requirement. See [www.gened.umd.edu](http://www.gened.umd.edu)  
 \*\*See Aerospace Advisor for appropriate electives: [www.aero.umd.edu](http://www.aero.umd.edu)

For Degree Clearance Only	
Degree: B.S. ENAE	Advisor: _____
Date: _____	Credits/GPA: _____

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

# Aerospace Engineering Four Year Academic Plan

Name: \_\_\_\_\_

UID: \_\_\_\_\_

Year 1	Fall		
Gateway requirements include: ENGL 101, CHEM 135, MATH 141, PHYS 161 and an approved Distributive Studies course. (Directly admitted freshman must successfully complete these courses and ENES 100 by 45 UM credits.)	Course	Credit	Grade
	ENAE 100	1	
	ENES 100 (SP)	3	
	MATH 140 (AR)	4	
	CHEM 135	3	
	ENGL 101 (AW)	3	
	<b>Total</b>	<b>14</b>	

Spring		
Course	Credit	Grade
ENAE 202	3	
ENES 102	3	
MATH 141	4	
PHYS 161 (NS)	3	
ORAL COMM (OC)	3	
<b>Total</b>	<b>16</b>	

Year 2	Fall		
	Course	Credit	Grade
	ENES 220	3	
	ENAE 283	3	
	MATH 241	4	
	PHYS 260 and PHYS 261 (NL)	3 & 1	
	ENES/ENEE 200 (HU/I-Series)	3	
	<b>Total</b>	<b>17</b>	

Spring		
Course	Credit	Grade
ENAE 200	1	
ENES 232	3	
MATH 240 or MATH 461	4 or 3	
MATH 246	3	
PHYS 270 and PHYS 271	3 & 1	
Hist & Social Sciences(HS)*	3	
<b>Total</b>	<b>17 or 18</b>	

Year 3	Fall		
	Course	Credit	Grade
	ENAE 301	3	
	ENAE 311 or ENAE414**	3	
	ENAE 362	3	
	ENAE 380	3	
	Scholarship in Practice (SP)*	3	
	<b>Total</b>	<b>15</b>	

Spring		
Course	Credit	Grade
ENAE 324	4	
ENAE 404 or ENAE 311***	3	
ENAE 432	3	
Professional Writing (PW)	3	
Hist & Social Sciences(HS)*	3	
<b>Total</b>	<b>16</b>	

Year 4	Fall		
	Course	Credit	Grade
	ENAE 403 or ENAE 441	3	
	ENAE 423	3	
	ENAE 455 or ENAE 457	3	
	ENAE 481 or ENAE 483	3	
	Humanities (HU)*	3	
	<b>Total</b>	<b>15</b>	

Spring		
Course	Credit	Grade
ENAE 464	3	
ENAE 482 or ENAE 484	3	
ENAE Elective	3	
Technical Elective	3	
Gen Ed/Elective	3	
<b>Total</b>	<b>15</b>	

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