AEROSPACE ENGINEERING GRADUATION PLAN

Name:_____ **UID:**_____

Current Engineering Students: https://eng.umd.edu/services/academic-policies

Prospective Engineering Students: https://lep.umd.edu/

Year 1	Fall			Spring		
	Course	***Credit***	***Grade***	***Course***	***Credit***	***Grade***
	ENAE 100	1		ENAE 202	3	
	ENES 100 (SP)	3		ENES 200 (HU/IS)	3	
	MATH 140 (AR)	4		MATH 141	4	
	CHEM 135	3		PHYS 161 (NS)	3	
	ENGL 101 (FSAW)	3		FSOC	3	
	Total	**14**		**Total**	**16**	

Year 2	Fall			Spring		
	Course	***Credit***	***Grade***	***Course***	***Credit***	***Grade***
	ENAE 203	1		ENAE 284	3	
	ENAE 222^	4		ENES 232	3	
	ENAE 283	3		MATH 243*	4	
	MATH 241	4		GenEd Requirement	3	
	PHYS 260 and PHYS 261 (NL)	3 & 1		PHYS 270 and PHYS 271	3 & 1	
	Total	**16**		**Total**	**17**	

Year 3	Fall			Spring		
	Course	***Credit***	***Grade***	***Course***	***Credit***	***Grade***
	ENAE 301	3		ENAE 325	3	
	ENAE 310	3		ENAE 364	3	
	ENAE 362	3		ENAE 410	3	
	ENAE 380	3		ENAE 432	3	
	GenEd Requirement	3		FSPW (need 60+ cr)	3	
	Total	**15**		**Total**	**15**	

Year 4	Fall			Spring		
	Course	***Credit***	***Grade***	***Course***	***Credit***	***Grade***
	ENAE 423	3		ENAE Elective	3	
	ENAE 480	2		ENAE Elective	3	
	GenEd Requirement	3		Technical Elective	3	
	ENAE403 or 404	3		Gen Ed/Elective‡	3	
	ENAE455 or 457	3		ENAE492 or 494	3	
	ENAE491 or 493	2				
	Total	**16**		**Total**	**15**	

*All students must complete two Distributive Studies courses that are approved for Big Question courses. The Understanding Plural Societies (UP) and Cultural Competence (CC) courses may also fulfill Distributive Studies categories.

^ A combo of ENES102 & ENES220 can also be used for this requirement. *A combo of MATH246 & (MATH240 or MATH461) can be used for this requirement. **Aeronautical track: ENAE403, ENAE455, ENAE491; Astronautical track: ENAE404, ENAE457, ENAE493

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

Updated Fall 2026

Name: _____

AEROSPACE ENGINEERING

UID: _____ __ A.A. __A.S. __Post-Bac

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 241 - Calculus III		4
MATH 243 - Intro Linear Algebra & Diff Equations		4
Engineering Sciences		
ENES 100 - Intro to Eng Design (SP)		0
ENES 232 - Thermodynamics		3

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

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

MAJOR REQUIREMENTS		
ENAE 100 - Aerospace Eng Profession		1
ENAE 202 -Computing Fundamentals Engr		3
ENAE 203 - Intro Computer-Aided Design		1
ENAE 222 - Aerospace Mechanics		4
ENAE 283 - Intro to Aerospace Systems		3
ENAE 284 - Foundations of Aerospace II		3
ENAE 301 - Dynamics of Aero Systems		3
ENAE 310 - Incompressible Aerodynamics		3
ENAE 325 - Aerospace Structures		3
ENAE 362 - Aero Instrumentation & Exp.		3
ENAE 364 - Aerospace Eng Lab		3
ENAE 380 - Flight Software Systems		3
ENAE 410 - Compressible Aerodynamics		3
ENAE 423 - Vibration & Aeroelasticity		3
ENAE 432 - Control of Aero. Systems		3
ENAE 480 - Fundamentals Aerospace Design		2
ENAE 4XX**		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 455 - Aircraft Propulsion & Power		3
ENAE 491 - Principle of Aircraft Design		2
ENAE 492 - Aeronautical Systems Design		3
Astronautical Track:		
ENAE 404 - Space Flight Dynamics		3
ENAE 457 - Space Propulsion & Power		3
ENAE 493 - Prin of Space Systems Design		2
ENAE 494 - 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 requirements

(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

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