AEROSPACE ENGINEERING, POST-BACCALAUREATE CERTIFICATE (P.B.C.)

All Graduate Certificate in Engineering Programs consist of 4 courses/12 credits. All students are expected to complete a preliminary course plan for their intended degree program. Degree planning worksheets can be found here: https://advancedengineering.umd.edu/degree-planning-sheets (https://advancedengineering.umd.edu/degree-planning-sheets/)

Students complete **12 credits** in one of the following specializations:

General

Course	Title	Credits
Select four courses and include at least one course from each of the three specializations:		12
ENAE641	Linear System Dynamics	
ENAE642	Atmospheric Flight Control	
ENAE654	Mechanics of Composite Structures	
ENAE655	Structural Dynamics	
ENAE656	Aeroelasticity	
ENAE674	Aerodynamics of Compressible Fluids	
ENAE676	Turbulence	
Total Credits		**12**

Rotocraft

Course	Title	Credits
Select four of the following:		12
ENAE631	Helicopter Aerodynamics I	
ENAE632		
ENAE633	Helicopter Dynamics	
ENAE634	Helicopter Design	
ENAE635	Helicopter Stability and Control	
Total Credits		**12**

Space

Course	Title	Credits
Select four of the following:		12
ENAE601	Astrodynamics	
ENAE602	Spacecraft Attitude Dynamics and Control	
ENAE691	Satellite Design	
ENAE694	Spacecraft Communications	
ENAE696	Spacecraft Thermal Design	
ENAE741	Interplanetary Navigation and Guidance	
ENAE791	Launch and Entry Vehicle Design	
Total Credits		**12**