~ Aerospace Engineering - Bachelor of Science Curriculum ~

Although this is a **suggested** outline, **all** courses listed below are **REQUIRED** for this degree. Refer to the Undergraduate Catalog for verification.
In the event of conflicting information, the Degree Audit and UF Catalog supersede any information provided on this sheet.

Critical tracking courses: MAC 2311, MAC 2312, MAC 2313, MAP 2302, PHY 2048, PHY 2049, CHM 2045 & EML 2023 must be completed by semester 5, not including summer terms. A 2.8 GPA is required for these 8 courses. A "C" or better must be earned in each course. Students have 2 attempts at each course, including drops.

Courses highlighted below and listed with an **asterisk (*)** - *(critical tracking course)* or **pound (#)** - *(MAE Core)* **require a grade of C or better.** All others require a D minus or better (i.e. a passing grade). Critical tracking must be completed within 2 attempts. All others have no limit.

Each line below must be satisfied independently. One course cannot be used for two lines; for instance, a course **cannot** count as a technical elective **AND** a science elective simultaneously.

Students must complete general education **international** and **diversity** requirements. This is often done while completing another general education requirement, typically humanities or social and behavioral sciences.
Students must complete unique **State Core** general education requirements. Refer to your Degree Audit or the UF Catalog for the lists of acceptable courses.

✔	Course Prefix and Number	Cr	Course Title and Info	Projected Offer	Pre-Requisites (REQUIRED = NO OVERRIDES)
Semester 1	**(15cr)**				
	CHM 2045/2095 *	3	General Chemistry 1 / Chemistry for Engineers 1 *(GE – P)*	F S Su	CHM 1025 with a C, MAC 1147 *or* MAC 1140 plus MAC 1114 *or* higher MAC course with a C
	CHM 2045L	1	General Chemistry Lab 1 *(GE – P)*	F S Su	CHM 1025 with a C, MAC 1147 *or* MAC 1140 plus MAC 1114 *or* higher MAC course with a C
	MAC 2311 *	4	Analytical Geometry & Calculus 1 *(GE – M)*	F S Su	Mathematics Placement Exam (ALEKS)
	ENC 1101 or ENC 1102	3	(Gen Ed Composition) - [WR-6000]	F S Su	
	Quest 1 Course	3	(GE – H) *(possible Diversity, International, or writing)*	F S Su	All incoming freshmen w/out an AA degree
	EML 2920 *or* EGN 2020C	1	Dept & Professional Orientation *or* Engg Design & Society	F S	
Semester 2	**(17cr)**				
	MAC 2312 *	4	Analytical Geometry & Calculus 2 *(GE – M)*	F S Su	MAC2311
	PHY 2048 *	3	Physics with Calculus 1 *(GE – P)*	F S Su	MAC2311
	PHY 2048L/2053L	1	Physics Lab 1 *(GE – P)*	F S Su	
	EML 2023 *	3	Computer Aided Graphics & Design *(Laptop required)*	F S Su	
	ENC 3246	3	Professional Communication for Engineers - *(GE–C)* [WR-6000]	F S Su	ENC1101 or ENC1102
	Science Elective *(Pick 1)*	3	☐ CHM2046/2096 ☐ BSC2010 ☐ PHY3101 ☐AST3018/3019	F S Su	*Check catalog*
Semester 3	**(16cr)**				
	EAS 2011	3	Introduction to Aerospace Engineering	F S	PHY2048
	MAC 2313 *	4	Analytical Geometry & Calculus 3 *(GE – M)*	F S Su	MAC2312
	PHY 2049 *	3	Physics with Calculus 2 *(GE – P)*	F S Su	MAC2312 & PHY2048
	PHY 2049L/2054L	1	Physics Lab 2 *(GE – P)*	F S Su	
	COP 2271 *(Lab is optional)*	2	Computer Programming for Engineers **Matlab** *(no exceptions)*	F S Su	MAC2312
	EGM 2511 #	3	Engineering Mechanics - Statics	F S Su	PHY2048
Semester 4	**(17cr)**				
	Quest 2	3	(GE – SS) *(possible Diversity, International, or writing)*	F S Su	
	EML 2322L	2	Design & Manufacturing Lab	F S Su	EML2023, ENC3246, ASE/ME majors only
	MAP 2302 *	3	Elementary Differential Equations	F S Su	MAC2312
	EGM 3344 #	3	Intro to Numerical Methods of Eng. Analysis	F S	MAC2313 & COP2271-**Matlab**
	EGM 3520 #	3	Mechanics of Materials	F S Su	EGM2511 & MAC2313
	EML 3100 #	3	Thermodynamics	F S Su	CHM2045, MAC2313, PHY2048
Semester 5	**(18cr)**				
	EMA 3010	3	Materials	F S Su	CHM2045
	EEL 3003	3	Elements of Electrical Engineering *(can sub-EEL 3111C)*	F S Su	MAC2313 & PHY2049
	EGM 3401 #	3	Engineering Mechanics - Dynamics	F S	EGM2511 & MAC2313
	EAS 4101	3	Aerodynamics	F S	EAS 2011 or EGN3353C, COP 2271, EML 3100, MAC 2313, MAP 2302
	MAP 4305 or MAP 5304	3	Differential Equations for Engineers and Physical Scientists	F S Su	MAP2302 & (MAS3111 or MAS4105 or EGM3344)
	GE – H or GE – SS	3	Humanities or Social & Behavioral Sciences - [WR-6000]	F S Su	

Semester 6	(15cr)					
EML 3301C	3	Mechanics of Materials Lab - [WR-6000]		F S		EMA3010, COP2271, EGM3520, ENC3246
EAS 4132 or EML 5714	3	Compressible Flow		F S		EAS4101 or EGN3353C
EAS 4510	3	Astrodynamics		F S		EGM3401 & (MAP4305 or MAP5304)
Aerospace Elective 1 of 2	3	☐ EAS4240 ☐ EAS4412 ☐ EML4140 ☐ EML4220 ☐ EML4507 or any graduate level course taught by the MAE department				*Check Catalog*
EML 4312	3	Control of Mechanical Eng. Systems		F S		EGM3401, EGM3344, MAP2302
Semester 7	**(15cr)**					
EAS 4200	3	Aerospace Structures		**F**		EGM3520
State Core GE – H	3	State Core Gen Ed Humanities (*list in Degree Audit*)		F S Su		
Aerospace Elective 2 of 2	3	☐ EAS4240 ☐ EAS4412 ☐ EML4140 ☐ EML4220 ☐ EML4507 or any graduate level course taught by the MAE department				*Check Catalog*
EAS 4400	3	Stability and Control of Aircraft		F S		EAS 4101 & EML 4312
EAS 4810C	3	Aerospace Sciences Lab and Design		F S		EAS4101, EAS4132, EML3301C
Semester 8	**(15cr)**					
EAS 4300	3	Aerospace Propulsion		F S		EAS4132
State Core GE – SS	3	State Core Gen Ed Social & Behavioral (*list is in Degree Audit*)		F S Su		
☐ EAS 4700 *OR*	3	☐ Aerospace Design 1 *OR*		**F**		☐ EAS 4510 and EML 4312
☐ EAS 4710		☐ Aerospace Design 2		**S**		☐ EAS 4101 and EAS 4400
Tech Elective 1 of 2	3	See *Technical Electives list* for approved courses (others require a petition)				*Check Catalog*
Tech Elective 2 of 2	3	See *Technical Electives list* for approved courses (others require a petition)				*Check Catalog*

Total Hours   **128**

> **Each** line requirement above must be met in order to meet the 128 credit hours of degree requirements for aerospace engineering.
> One single course **cannot** count for more than one line above. For example, you may **not** use BSC2010 as a science elective and also a technical elective; it will only count for one requirement.
> Pre-requisites must be met in order to take a course. **No exceptions**.
> The Degree Audit and UF Catalog supersede the information in this document. **When in doubt, follow your Degree Audit.**