Typical 4-year Plan

BACHELOR OF SCIENCE IN AEROSPACE ENGINEERING

(Accredited by the Engineering Accreditation Commission of ABET)

First Semester		Units	Second Semester		Units
		FRESHMAN YEAR			
ENGR 102A+B	Intro. To Engineering	1+2	**MATH 129**	Calculus II	3
MATH 125[1]	Calculus I (see note below)	3	**AME 105**	Intro. To MATLAB I	1
Or { Math 122A (1) + Math 122B (4)}			**PHYS 141**	Introductory Mechanics	4
CHEM 151	General Chemistry 1	4	**ECE 175**	Computer Prog. For Engr. Appl.	3
ENGL 101	First Year Composition	3	**ENGL 102**	First-Year Composition	3
XXXX[2]	General Education	3	XXXX[2]	General Education	3
Total		*16*	*Total*		*17*
		SOPHOMORE YEAR			
MATH 223	Vector Calculus	4	**MATH 254**	Introduction to Ordinary Differential Equations	3
PHYS 241	Introductory Electricity and Magnetism	4	**AME 230**	Thermodynamics	3
CE 214	Statics	3	**AME 250**	Dynamics	3
ABE 221/CE 210	Intro to CAD/Engineering Graphics	3	**AME 220**[S]	Intro to Aerospace Engineering	3
XXXX[2]	General Education	3	**AME 205**	Intro to MATLAB II	1
Total		*17*	XXXX[2]	General Education	3
			Total		*18*
		JUNIOR YEAR			
AME 300	Instrumentation Laboratory	3	AME 302	Numerical Methods	3
AME 301	Engineering Analysis	3	AME 324L	Mechanics of Materials Laboratory	1
AME 324A	Mechanical Behavior of Engineering Materials	3	AME 321[S]	Aircraft Performance	3
AME 320	Aerodynamics	3	AME 323[S]	Gasdynamics	3
MSE 331R	Fundamentals of Materials for Engineers	3	AME 324C[S,3]	Aerospace Structures	3
AME 313	Aero/Mech Engineering Laboratory	1	XXXX[2]	General Education	3
Total		*16*	*Total*		*16*
		SENIOR YEAR			
AME 420[F]	Aircraft Conceptual Design	3	AME 401[S]	Senior Aerospace Laboratory	2
AME 457 [F]	Orbital Mechanics	3	AME 463[S]	Finite Element Analysis w/ANSYS	3
AME 425[F]	Aerospace Propulsion	3	**OR**		
AME 427[F]	Stability and Control of Aerospace Vehicles	3	AME 431[S]	Num Methods in Fluid Mech + Heat Trans	
AME 495S[F]	Colloquium	1	AME 422[S]	Aerospace Engineering Design	3
Tech Elective[4]		3	AME 4XX[4]	Tech Elective	3
			XXXX[2]	General Education	
Total		*16*	*Total*		*14*

Courses in **bold**, when taken at the UA, are used to calculate your Advanced Standing (AS) GPA. Minimum AS GPA of 2.500 and at least 12 units of UA coursework in bold needed to be eligible for AS (required to enroll in 300 and 400 level coursework)

1. MATH 122A/B is a 5-unit version of MATH 125. Enrollment in MATH 122A/B or 125 is dependent on MATH placement exam scores.
2. Courses must meet University general education requirements including the Diversity requirement. Consult your advisement report for more details.
3. AME 324B (Engineering Component Design) may be taken in place of AME 324C.
4. 6 units of approved technical electives are required. The list of approved technical elective courses can be found under "Resources and Tools" at www.ame.arizona.edu/ame-programs. This total must include least 3-credits 400-level coursework with the AME prefix.

Courses with "F" and "S" superscripts denote fall- and spring-only courses. Courses without superscripts are taught in both semesters.