

Name \_\_\_\_\_

Major: Aerospace Engineering

Degree BSE

ASU ID \_\_\_\_\_

Concentration: Aeronautics

Anticipated Grad. Date \_\_\_\_\_

AGEC-A, AGEC-B, AGEC-S;

Completed:  Yes  No

<b>I. English Proficiency (6 hrs)</b> <i>(University requirement – “C” min required)</i>	Hrs Cr ASU Tr	Trans From	Gr
+ENG 101 / 107 First-Year Comp (3) and +ENG 102 / 108 First-Year Comp (3)			
Or, if eligible (see Catalog for eligibility), +ENG 105 Adv First-Year Comp (3) and An Applicable Elective (3) – see Department			
<b>Sub Total (I)</b>			

<b># C. Lower Division Engr (19 hrs)</b>	Hrs Cr ASU Tr	Trans From	Gr
+MAE 100 Intro to ME & AE (CS)	3		
+MAE 212 Engineering Mechanics	4		
MAE 213 Solid Mechanics	3		
MAE 214 Computer Aided Engr I	1		
MAE 240 Thermofluids I	4		
EEE 202 Circuits I	4		
<b>Sub Total (III)</b>			

**II. General Requirements (15 hrs)** *(See Catalog for approved courses)*

**A. Humanities & Social Sciences (15 hrs min)**

*(Required: 1 course upper division; plus a minimum of two courses that satisfy three awareness areas: cultural (C), global (G), and historical (H). Double counting is permissible between HU or SB and the awareness areas and also within the awareness areas.)*

**Humanities, Fine Arts, and Design (6 hrs min)(HU)**

Hrs Cr	ASU Tr	Trans From	Gr

**Social/Behavioral Sciences (6 hrs min)(SB)**

Hrs Cr	ASU Tr	Trans From	Gr

**Awareness Areas**

Hrs Cr	ASU Tr	Trans From	Gr
<b>Cultural</b>			
<b>Global</b>			
<b>Historical</b>			

**B. Literacy/Critical Inquiry**

#L: MAE 360 Aerodynamics <sup>1</sup>	<b>Satisfied by Courses in Major</b>
#L: MAE 362 Hgh-Speed Aerodynam <sup>1</sup>	
#L: MAE 400 Engineering Profession	

**C. Natural Sciences (8 hrs)**

+SQ: PHY 121/122 Physics I & Lab I	<b>Satisfied by Courses in Major</b>
+SQ: PHY 131/132 Physics II & LabII	

**D. Mathematical Studies (6 hrs)**

+#CS: MAE 100 Intro to ME & AE	<b>Satisfied by Courses in Major</b>
+MA: MAT 275 Mod Diff Eqns	

**Sub Total (II)**

**III. Required Lower Division Courses (46 hrs)**

**A. Natural Sciences/Basic Sciences (15 hrs)**

Hrs Cr	ASU Tr	Trans From	Gr
BME 111 Engr Persp on Bio Systems	3		
+ CHM 114, 115 <sup>2,3</sup> , or 116 <sup>3</sup> Chemistry (SQ)	4		
+ PHY 121 Physics I (SQ) <sup>4</sup>	3		
+ PHY 122 Physics Lab I (SQ) <sup>4</sup>	1		
+ PHY 131 Physics II (SQ) <sup>4</sup>	3		
+ PHY 132 Physics Lab II (SQ) <sup>4</sup>	1		

**B. Mathematical Studies (12 hrs)**

+MAT 265 Calc for Engrs I	3		
+MAT 266 Calc for Engrs II	3		
+MAT 267 Calc for Engrs III	3		
+MAT 275 Mod Diff Equ (MA)	3		

**# IV. Required Upper Division Courses (50 hrs)**

MAE 313 Aircraft Dynam. & Control	3		
MAE 318 Sensors and Controls	5		
MAE 322 Structural Mechanics	4		
MAE 344 Fund. Of Aerospace Design	3		
MAE 360 Aerodynamics (L) <sup>1</sup>	4		
MAE 362 Hgh-Speed Aerodynam (L) <sup>1</sup>	4		
MAE 384 Numerical Methods (CS)	3		
MAE 400 Engineering Profession (L)	3		
MAE 415 Vibration Analysis	3		
MAE 462 Space Vehicle Dynamics	3		
MAE 463 Propulsion	3		
MAE 468 Aero System Design	3		
+MAT 343 Applied Linear Algebra	3		
<b>Technical Electives (6 hrs)</b>			
<b>Sub Total (IV)</b>			

**V. General Elective (3 hrs)**

ASU 101 The ASU Experience	1		
	2		
<b>Sub Total (V)</b>			

**Total Upper Division \_\_\_\_\_ (minimum 45 required)**

+ A minimum grade of “C” (2.0) required

# Designates Major Course: A minimum cumulative GPA of 2.00 required

*Designates a skill-set course*

<sup>1</sup> Both MAE 360 and 362 must be completed for L credit

<sup>2</sup> Only 4 hours of CHM 115 will apply toward degree credit

<sup>3</sup> CHM 113 is prerequisite and does not apply toward degree credit

<sup>4</sup> Must complete lecture and lab to receive SQ credit

**Graduation Requirements**

Regular Curriculum – 120 Hours

<b>Semester Hour Summary</b>	Hrs/ASU	Tr Hrs	Total
I. English Proficiency			
II. General Requirements			
III. Required Lower Division			
IV. Required Upper Division			
V. General Elective			
<b>Total Program Hours</b>			