

Name \_\_\_\_\_

Major: Mechanical Engineering

Degree BSE

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

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

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

Completed:  Yes  No

I. English Proficiency (6 hrs) (University requirement – “C” min required)	Hrs Cr	Trans	Gr
	ASU Tr	From	
+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			
Sub Total (I)			

**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)			

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

Awareness Areas			
Cultural			
Global			
Historical			

**B. Literacy/Critical Inquiry (6 hrs)**

#L: MAE 491 Thermofluids Lab	Satisfied by Courses in Major
#L: MAE 400 Engineering Profession	

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

+SQ: PHY 121/122 Physics I/Lab I	Satisfied by Courses in Major
+SQ: PHY 132 Physics Lab II	

**D. Mathematical Studies (6 hrs) – mark after taken**

#CS: MAE 100 Intro to ME & AE	Satisfied by Courses in Major
+MA: MAT 275 Modern Diff Eqs	

Sub Total (II) \_\_\_\_\_

**III. Required Lower Division Courses (52 hrs)**

**A. Natural Sciences/Basic Sciences (18 hrs)**

	Hrs Cr	Trans	Gr
BME 111 Engr Persp on Bio Sys or	3		
BCH 231 Principles of Bio Chemistry			
+SQ: CHM 114, 115 <sup>1,2</sup> , or 116 <sup>2</sup> Chemistry	4		
CHM 231 Intro to Organic Chem or	3		
CHM 240 Intro. Physical Chem			
+SQ: PHY 121 Physics I	3		
+SQ: PHY 122 Physics Lab I	1		
+SQ: PHY 131 Physics II	3		
+SQ: PHY 132 Physics Lab II	1		

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

MA: MAT 275 (or 274) Mod Diff EQ	3		
MAT 294 ST: Calc for Engrs I	3		
MAT 294 ST: Calc for Engrs II	3		
MAT 294 ST: Calc for Engrs III	3		

# C. Lower Division Engr(22 hrs)	Hrs Cr	Trans	Gr
	ASU Tr	From	
CS: MAE 100 Intro to ME & AE	3		
MAE 212 Engineering Mechanics	3		
MAE 213 Mechanics of Solids	4		
MAE 214 CAE I	1		
MAE 240 Thermofluids I	4		
MSE 250 Struc & Prop of Materials	3		
EEE 202 Circuits I	4		

Sub Total (III) \_\_\_\_\_

**# IV. Required Upper Division Courses (47 hrs)**

MAE 318 Sensors and Controls	5		
MAE 322 Structural Mechanics	4		
MAE 323 CAE II	1		
MAE 340 Thermofluids II	3		
MAE 342 Principles of Design	3		
MAE 343 CAE III	1		
CS: MAE 384 Numerical Methods	3		
L: MAE 400 Engineering Profession	3		
MAE 488 ME Design I	3		
MAE 489 ME Design II	3		
L: MAE 491 Thermofluids Lab	3		
MAT 343 Applied Linear Algebra	3		

**Technical Electives (12 hrs)**


Sub Total (IV) \_\_\_\_\_

**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> Only 4 hours of CHM 115 will apply toward degree credit  
<sup>2</sup> CHM 113 is prerequisite and does not apply toward degree credit

**Graduation Requirements**

Regular Curriculum – 120 Hours

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

Submitted by \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Date \_\_\_\_\_

Approved \_\_\_\_\_  
 Advisor \_\_\_\_\_ Date \_\_\_\_\_

Approved \_\_\_\_\_  
 Department Chair \_\_\_\_\_ Date \_\_\_\_\_