

Name _____

Major: Mechanical Engineering

Degree BSE

ASU ID _____

Anticipated Grad. Date _____

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

Completed: Yes No

ASU Requirement for all incoming Freshmen			
ASU 101 The ASU Experience	1 credit		

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)

	Hrs	Cr	Trans	Gr

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

	Hrs	Cr	Trans	Gr

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 **Satisfied by Courses in Major**

C. Natural Sciences/Basic Sciences (8 hrs)

+SQ: PHY 121/122 Physics I & Lab I **Satisfied by Courses in Major**

+SQ: PHY 131/132 Physics II & Lab II **Satisfied by Courses in Major**

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 **Satisfied by Courses in Major**

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				
BCH 361 Princ of Biochemistry	3			
+CHM 114, 115 ^{1,2} , or 116 ² Chemistry (SQ)	4			
+CHM 231 Intro to Organic Chem or				
+CHM 240 Intro. Physical Chem	3			
+PHY 121 Physics I (SQ) ³	3			
+PHY 122 Physics Lab I (SQ) ³	1			
+PHY 131 Physics II (SQ) ³	3			
+PHY 132 Physics Lab II (SQ) ³	1			

	Hrs	Cr	Trans	Gr
	ASU	Tr	From	
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 EQ (MA)	3			
# C. Lower Division Engr (22 hrs)				
+MAE 100 Intro to ME & AE (CS)	3			
+MAE 212 Engineering Mechanics	4			
MAE 213 Mechanics of Solids	3			
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)

	Hrs	Cr	Trans	Gr
#MAE 318 Sensors and Controls	5			
#MAE 322 Structural Mechanics	4			
#MAE 323 CAE II	2			
#MAE 340 Thermofluids II	3			
#MAE 342 Principles of Design	3			
#MAE 384 Numerical Methods (CS)	3			
#MAE 400 Engineering Profession (L)	3			
#MAE 488 ME Design I	3			
#MAE 489 ME Design II	3			
#MAE 491 Experimental Mech Engr (L)	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
¹ Only 4 hours of CHM 115 will apply toward degree credit
² CHM 113 is prerequisite and does not apply toward degree credit
³ Must complete lecture and lab to receive SQ credit

Graduation Requirements: Regular Curriculum – 120 Hours

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