

Course Subject and Title <i>(courses in bold/shading are critical)</i>	Hrs.	Upper Division	Completed Transfer Pathway: <input type="checkbox"/> MAPP <input type="checkbox"/> TAG <input type="checkbox"/> ATP <input type="checkbox"/> None		Completed General Education: <input type="checkbox"/> AGECE <input type="checkbox"/> IGETC/CSUGE <input type="checkbox"/> None	
			Transfer Course/Grade	Minimum Grade if Required	Additional Critical Requirement Notes	
<b>TERM ONE: 0-15 CREDIT HOURS</b>						
+ASU 101-FSE: The ASU Experience	1	<input type="checkbox"/>				<ul style="list-style-type: none"> <li>+ ASU 101-FSE and MAE 100 required for freshmen and should be completed first semester. Non-freshmen see advisor for petitioning replacement electives.</li> <li>• An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses</li> <li>• ASU Math Placement Exam score determines placement in Mathematics course</li> <li>*CHM 113 is a prerequisite and does not apply towards degree credit</li> <li>**If ENG 105 a 3 hr applicable elective must also be taken prior to graduation. See Advisor.</li> <li>• <b>Maintain minimum ASU cumulative GPA of 2.0</b></li> </ul>
<b>CHM 114: General Chemistry for Engineers (SQ) OR CHM 115: General Chemistry with Qualitative Analysis (SQ) OR CHM 116: General Chemistry II* (SQ)</b>	4	<input type="checkbox"/>		Grade of C		
+MAE 100: Intro to Mechanical and Aerospace Engineering (or Department Approved Elective)	2	<input type="checkbox"/>		Grade of C in MAE 100		
<b>MAT 265: Calculus for Engineers I (MA)</b>	3	<input type="checkbox"/>		Grade of C		
<b>ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition** OR ENG 107 or 108: English for Foreign Students</b>	3	<input type="checkbox"/>		Grade of C		
Social & Behavioral Science (SB) AND Cultural Diversity in the US (C), Global Awareness (G), or Historical Awareness (H)	3	<input type="checkbox"/>				
<b>TERM TWO: 16-30 CREDIT HOURS</b>						
<b>MAT 266: Calculus for Engineers II</b>	3	<input type="checkbox"/>		Grade of C	<ul style="list-style-type: none"> <li>• <b>Maintain minimum ASU cumulative GPA of 2.0</b></li> </ul>	
<b>PHY 121/122: University Physics I/ Laboratory I (SQ)</b>	3/1	<input type="checkbox"/>		Grade of C		
<b>ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition** OR ENG 107 or 108: English for Foreign Students</b>	3	<input type="checkbox"/>		Grade of C		
Humanities, Fine Arts & Design (HU) AND Cultural Diversity in the US (C), Global Awareness (G), or Historical Awareness (H)	3	<input type="checkbox"/>				
<b>TERM THREE: 31-45 CREDIT HOURS</b>						
<b>MAE 212: Engineering Mechanics</b>	4	<input type="checkbox"/>		Grade of C	<ul style="list-style-type: none"> <li>• <b>Complete 10 critical courses by end of term 3</b></li> <li>• <b>Maintain minimum ASU cumulative GPA of 2.0</b></li> <li>• Complete First-Year Composition requirement: ENG 101 &amp; 102 or ENG 107 &amp; 108 or ENG 105</li> </ul>	
<b>MAT 275: Modern Differential Equations</b>	3	<input type="checkbox"/>		Grade of C		
<b>PHY 131/132: University Physics II Electricity and Magnetism/ Laboratory II</b>	3/1	<input type="checkbox"/>		Grade of C		
MAE 214: Computer-Aided Engineering I	1	<input type="checkbox"/>		Grade of C		
MAT 267: Calculus for Engineers III	3	<input type="checkbox"/>		Grade of C		
<b>TERM FOUR: 46-60 CREDIT HOURS</b>						
<b>MAE 213: Solid Mechanics</b>	3	<input type="checkbox"/>		Grade of C		
<b>MAE 240: Thermofluids I</b>	4	<input type="checkbox"/>		Grade of C		
EEE 202: Circuits I	4	<input type="checkbox"/>		Grade of C		
MAT 343: Applied Linear Algebra	3	<input checked="" type="checkbox"/>		Grade of C		
MSE 250: Structure and Properties of Materials	3	<input type="checkbox"/>		Grade of C		
<b>TERM FIVE: 61-75 CREDIT HOURS</b>						
BME 111: Engineering Perspectives on Biological Systems (or dept approved BIO)	3	<input type="checkbox"/>				
MAE 322: Structural Mechanics	4	<input checked="" type="checkbox"/>		Grade of C		
MAE 340 Thermofluids II	3	<input checked="" type="checkbox"/>		Grade of C		
MAE 384: Numerical Methods for Engineers (CS)	3	<input checked="" type="checkbox"/>		Grade of C		
Humanities, Fine Arts & Design (HU) AND Cultural Diversity in the US (C), Global Awareness (G), or Historical Awareness (H)	3	<input checked="" type="checkbox"/>				
<b>TERM SIX: 76-90 CREDIT HOURS</b>						
MAE 323: Computer-Aided Engineering II	2	<input checked="" type="checkbox"/>		Grade of C	<ul style="list-style-type: none"> <li>• At least one technical elective is required to be in the thermo-fluids area. See Advisor for approved list.</li> </ul>	
MAE 318: Sensors and Controls	5	<input checked="" type="checkbox"/>		Grade of C		
MAE 342: Principles of Mechanical Design	3	<input checked="" type="checkbox"/>		Grade of C		
Technical Elective	3	<input checked="" type="checkbox"/>		Grade of C		
<b>TERM SEVEN: 91-105 CREDIT HOURS</b>						
MAE 488: Mechanical Engineering Design I	3	<input checked="" type="checkbox"/>		Grade of C	<ul style="list-style-type: none"> <li>• At least one technical elective is required to be in the thermo-fluids area. See Advisor for approved list.</li> </ul>	
MAE 491: Experimental Mechanical Engineering (L)	3	<input checked="" type="checkbox"/>		Grade of C		
Technical Elective	3	<input checked="" type="checkbox"/>		Grade of C		
Social & Behavioral Science (SB) AND Cultural Diversity in the US (C), Global Awareness (G), or Historical Awareness (H)	3	<input type="checkbox"/>				
UD Humanities, Fine Arts & Design (HU) OR Social & Behavioral Science (SB)	3	<input checked="" type="checkbox"/>				
<b>TERM EIGHT: 106-120 CREDIT HOURS</b>						
MAE 400: Engineering Profession (L)	3	<input checked="" type="checkbox"/>		Grade of C	<ul style="list-style-type: none"> <li>• See advisor for approved General Electives.</li> <li>• At least one technical elective is required to be in the thermo-fluids area. See Advisor for approved list.</li> </ul>	
MAE 489: Mechanical Engineering Design II	3	<input checked="" type="checkbox"/>		Grade of C		
Technical Elective	3	<input checked="" type="checkbox"/>		Grade of C		
Technical Elective	3	<input checked="" type="checkbox"/>		Grade of C		
General Elective	3	<input type="checkbox"/>				

**Graduation Requirements Summary:**

Total Hours Regular Curriculum (120)	Total Hrs at ASU (30 min)	Hrs Resident Credit for Academic Recognition (56 min)	Major GPA (2.000 Min. CUM GPA )	Total UD Hrs (45 min)	Total Comm. College Hrs. (64 Max)

**General University Requirements: Legend**

- General Studies Core Requirements:
  - Literacy and Critical Inquiry (L)
  - Mathematical Studies (MA)
  - Computer/Statistics/Quantitative applications (CS)
  - Humanities, Fine Arts, and Design (HU)
  - Social and Behavioral Sciences (SB)
  - Natural Science-Quantitative (SQ)
  - Natural Science-General (SG)
- General Studies Awareness Requirements
  - Cultural Diversity in the US (C)
  - Global Awareness (G)
  - Historical Awareness (H)
- First-Year Composition

**Additional Notes:**