

Course Subject and Title <i>(courses in bold/shading are critical)</i>	Hrs.	Upper Division	Completed ATP: <input type="checkbox"/> Yes <input type="checkbox"/> No		Completed AGEC: <input type="checkbox"/> Yes <input type="checkbox"/> No
			Transfer Course/Grade	Minimum Grade if Required	Additional Critical Requirement Notes
<b>TERM ONE: 0-15 CREDIT HOURS</b>					
ASU 101: The ASU Experience	1	<input type="checkbox"/>			<ul style="list-style-type: none"> <li>ASU 101 is for ASU freshman students only Not required of transfer students</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>Students complete either MAT 170, APM/MAT 265, APM/MAT 266 and APM 301 or APM/MAT 265, APM/MAT 266, MAT 274/275 and APM 301 depending on math placement score</li> <li>Complete either a MAT or APM and a PHY or a CHM course (recommend both a math class and a science course. Completion of College Algebra and College Trig is equivalent to Precalculus.)</li> <li>Complete MET course (recommend MET 150, MET 160).</li> </ul>
<i>Complete 1 course (depending on math placement score) from:</i> <b>MAT 170: Precalculus or</b> <b>APM 265: Mathematics of Change I (or MAT 265)</b>	3	<input type="checkbox"/>			
<i>Complete 1 course from:</i> <b>MET 150: Introduction to Engineering Technology or</b> <b>MET 160: CADD and Solid Modeling</b>	1 or 2	<input type="checkbox"/>			
CHM 113: General Chemistry (SQ)	4	<input type="checkbox"/>			
PHY 111: General Physics /PHY 113: General Physics Lab (SQ)	4	<input type="checkbox"/>			
ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or 108: English for Foreign Students	3	<input type="checkbox"/>		Grade of C	
<b>TERM TWO: 16-29 CREDIT HOURS</b>					
<i>Complete 1 course from:</i> <b>APM 265: Mathematics of Change I (or MAT 265) or</b> <b>APM 266: Mathematics of Change II (or MAT 266) (if APM/MAT 265 completed)</b>	3	<input type="checkbox"/>			<ul style="list-style-type: none"> <li>Complete a MAT or APM or PHY or CHM course (recommend both a math class, ideally Calc I and a science course. Do Physics as soon as its math prerequisite is met)</li> <li>Complete MET or AET course (recommend MET 160 and MET 230)</li> </ul>
<i>If not completed in Term One, complete 2 courses from:</i> <b>CHM 113: General Chemistry (SQ) or</b> <b>PHY 111: General Physics /PHY 113: General Physics Lab (SQ)</b> <b>PHY 112: General Physics /PHY 114: General Physics Lab (if PHY 111 &amp; 113 completed)</b>	4	<input type="checkbox"/>			
<i>If not completed in Term One:</i> <b>MET 160: CADD and Solid Modeling</b>	2	<input type="checkbox"/>			
<b>MET 230: Introduction to Engineering Materials</b>	2	<input type="checkbox"/>			
ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or 108: English for Foreign Students	3	<input type="checkbox"/>		Grade of C	
<b>TERM THREE: 30-44 CREDIT HOURS</b>					
<b>APM 266: Mathematics of Change II (or MAT 266) or</b> <b>MAT 274: Differential Equations (MA) (only required for students who did not complete MAT 170)</b>	3	<input type="checkbox"/>			<ul style="list-style-type: none"> <li>Complete MET 211</li> <li>Complete an APM or MAT and PHY or CHM course</li> <li>First-Year Composition Requirement Completed (ENG 101/107 AND ENG 102/108 or ENG 105)</li> </ul>
<i>If not already completed, complete remaining courses from:</i> <b>CHM 113: General Chemistry (SQ) or</b> <b>PHY 112: General Physics /PHY 114: General Physics Lab (if PHY 111 &amp; 113 completed)</b>	(4)	<input type="checkbox"/>			
<b>MET 211: Statics</b>	3	<input type="checkbox"/>			
MET 231: Manufacturing Processes	3	<input type="checkbox"/>			
AET 210: Measurements and Testing	3	<input type="checkbox"/>			
Humanities (HU) course with awareness areas of C, G, or H	3	<input type="checkbox"/>			
<b>TERM FOUR: 45-60 CREDIT HOURS</b>					
<b>APM 301: Introductory Statistics (CS)</b>	3	<input checked="" type="checkbox"/>			<ul style="list-style-type: none"> <li>Complete MET 313</li> <li>Complete an APM or MAT course</li> </ul>
<b>MET 313: Applied Mechanics of Materials</b>	3	<input checked="" type="checkbox"/>			
MET 314: Applied Mechanics of Materials Lab	1	<input checked="" type="checkbox"/>			
MET 345: Advanced Manufacturing Processes	3	<input checked="" type="checkbox"/>			
EST 210, Circuit Analysis I	3	<input type="checkbox"/>			
Literacy and Critical Inquiry (L) (ENG 301 recommended)	3	<input type="checkbox"/>			
<b>TERM FIVE: 61-77 CREDIT HOURS</b>					
MET 340: Thermo-Fluids I	3	<input checked="" type="checkbox"/>			
AET 312: Applied Engineering Mechanics: Dynamics	3	<input checked="" type="checkbox"/>			
MET 300: Applied Material Science	3	<input checked="" type="checkbox"/>			
MET 309: Nondestructive Testing and Quality Assurance	1	<input checked="" type="checkbox"/>			
MET 331: Machine Design I	3	<input checked="" type="checkbox"/>			
MET 396: Professional Orientation	1	<input checked="" type="checkbox"/>			
Humanities (HU) course with awareness areas of C, G, or H	3	<input type="checkbox"/>			

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<b>TERM SIX: 78-95 CREDIT HOURS</b>					
MET 409: Applied Engineering Economics	3	<input checked="" type="checkbox"/>			• See additional notes below for concentration courses
MET 432: Thermo-Fluids II	3	<input checked="" type="checkbox"/>			
Technical Elective	3	<input checked="" type="checkbox"/>			
Concentration Elective:	3	<input checked="" type="checkbox"/>			
Concentration Elective:	3	<input checked="" type="checkbox"/>			
Social Behavior (SB) course (awareness areas of C, G, or H as needed)	3	<input type="checkbox"/>			
<b>TERM SEVEN: 96-113 CREDIT HOURS</b>					
MET 460: Capstone Project I	3	<input checked="" type="checkbox"/>			• See additional notes below for concentration courses
TWC 446: Technical and Scientific Reports (L)	3	<input checked="" type="checkbox"/>			
Concentration Elective:	3	<input checked="" type="checkbox"/>			
Concentration Elective:	3	<input checked="" type="checkbox"/>			
Technical Elective:	3	<input checked="" type="checkbox"/>			
Social Behavior (SB) course (awareness areas of C, G, or H as needed)	3	<input type="checkbox"/>			
<b>TERM EIGHT: 114-128 CREDIT HOURS</b>					
MET 401: Quality Assurance	3	<input checked="" type="checkbox"/>			• See additional notes below for concentration courses
MET 461: Capstone Project II	3	<input checked="" type="checkbox"/>			
Concentration Elective	3	<input checked="" type="checkbox"/>			
Concentration Elective	3	<input checked="" type="checkbox"/>			
Upper division Humanities, Fine Arts & Design (HU) or Social & Behavioral Science (SB)	3	<input checked="" type="checkbox"/>			

**Graduation Requirements Summary:**

Total Hours (128)	Total Hrs at ASU (30)	Hrs Resident Credit for Academic Recognition(56)	Overall GPA (2.00 min)	Total UD Hrs (45)	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: All Concentrations are 18 credits**

**Base Mechanical Option**

MET 434 (3) Thermo Fluids III  
 MET 351 (3) Intro to Automation  
 MET 418 (3) Composites Mtls Mfg  
 MET 438 (3) Machine Design II  
 MET 440 (3) Finite Element Analysis  
 Tech Elec (3)

**Aeronautical Concentration**

AET 215 (2) Aircraft Systems (take in 1<sup>st</sup> two years of program)  
 AET 300 (3) Aircraft Design I  
 AET 417 (3) Aerospace Structures  
 AET 415 (3) Gas Dyn & Propul  
 AET 420 (1) Wind Tunnel Test  
 MET 434 (3) Thermo Fluids III  
 MET 418 (3) Composites Mtls Mfg

**Automation Concentration**

MET 341 (3) Mfg Analysis  
 MET 351 (3) Intro to Automation  
 MET 416 (3) Applied CIM  
 MET 438 (3) Machine Design II  
 MET 455 (3) Auto Sys Integration  
 Tech Elec (3)

**Automotive Concentration**

MET 321 (3) Intro to Automotive (take in fall of junior year)  
 MET 421 (3) Vehicle Powertrains  
 MET 423 (3) Vehicle Chassis Design  
 MET 424 (3) Vehicle Elec & Control sys  
 MET 426 (3) Vehicle Thermal Design  
 MET 427 (3) System Integration & Test