



Associate in Science (AS) Degree  
 MCC/ASU Fulton Civil Engineering (Construction Engineering) Advisement Flow Chart  
 2009-2010 Catalog Year

First Year Composition	Chem & Geo Requirements	Physics Requirements	Mathematics Requirements	Engineering Requirements
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>FYC</b> ENG 101 or 107            First-Year Comp (3)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px;"> <b>FYC</b> ENG 102 or 108            First-Year Comp (3)            Completed: _____         </div>	<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;">Program Prerequisites</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           CHM 130/130LL            General Chem I (4)            Completed: _____         </div> </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           CHM 151/151LL            General Chem I (4)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           CHM 152/152LL            General Chem II (4)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px;">           GLG 110            Environ Geology (3)            Completed: _____         </div>	<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;">Program Prerequisites</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           PHY 111            General Physics I (4)            Completed: _____         </div> </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           PHY 112            General Physics 2 (4)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>SQ</b> PHY 121            Univ Physics I (4)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px;"> <b>SQ</b> PHY 131            Univ Physics II (4)            Completed: _____         </div>	<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;">Program Prerequisites</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           MAT 150, 151 or 152            College Algebra (3)            Completed: _____         </div> </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           MAT 182 or 187            Trig or PreCalc (3)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>MA</b> MAT 221            Calculus I (4)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           MAT 225            Linear Algebra (3)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           MAT 231            Calculus II (4)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           MAT 241            Calculus III (4)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px;">           MAT 262            Diff Equations (3)            Completed: _____         </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           ECE 102            Engineering Anal (2)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           ECE 103            Engineering Design (2)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           ECE 201            Intro to Statics (2)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           ECE 202            Intro to Dynamics (2)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           ECE 203            Appl of Mech (2)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">           ECE 215            Mech of Materials (3)            Completed: _____         </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px;">           EEE 202            Circuits &amp; Devices (5)            Completed: _____         </div>
<b>Social &amp; Behavioral Sciences</b>				
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>SB</b> ECN 211 or 212            3 Credits            Completed: _____         </div> <div style="border: 1px solid black; padding: 5px;"> <b>SB</b> _____            3 Credits            Completed: _____         </div>	<p><b>Note:</b> Students who have not completed high school chemistry or completed high school chemistry more than two years prior to enrolling in CHM 151 should take CHM 130/130LL.</p>	<p><b>Note:</b> Students who have not completed high school physics or completed high school physics more than two years prior to enrolling in PHY 121 should take PHY 111.</p>		
<b>Humanities and Fine Arts</b>				
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>HU</b> _____            3 Credits            Completed: _____         </div> <div style="border: 1px solid black; padding: 5px;"> <b>HU</b> _____            3 Credits            Completed: _____         </div>				
<b>Reading and Communication</b>				
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>Oral Communication</b>            COM 230 (0-3 Credits)            Completed: _____         </div> <div style="border: 1px solid black; padding: 5px;"> <b>Critical Reading</b>            CRE 101 (0-3 Credits)            Completed: _____         </div>				

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-FSE: The ASU Experience	1	<input type="checkbox"/>			<ul style="list-style-type: none"> <li>Complete CHM 114 or 116; MAT 265 with a minimum grade of "C"</li> <li>ASU 101-FSE should be completed first semester.</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> </ul> *CHM 113 is a prerequisite and does not apply toward degree credit. **If ENG 105 a 3 hr applicable elective must also be taken prior to graduation. See Advisor.
<b>CEE 100: Intro to Civil and Environmental Engineering OR ECN 211/212 (SB): Macroeconomic Principles/ Microeconomic Principles or ECN 201: Economic Issues &amp; Analysis (SB)</b>	2 or 3	<input type="checkbox"/>		Grade of C in CEE 100	
<b>CHM 114: General Chemistry for Engineers (SQ) OR CHM 116: General Chemistry II* (SQ)</b>	4	<input type="checkbox"/>			
<b>MAT 265: Calculus for Engineers I</b>	3	<input type="checkbox"/>		Grade of C	
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: 16-30 CREDIT HOURS</b>					
<b>CEE 100: Intro to Civil and Environmental Engineering OR ECN 211/212 (SB): Macroeconomic Principles/ Microeconomic Principles or ECN 201: Economic Issues &amp; Analysis (SB)</b>	2 or 3	<input type="checkbox"/>		Grade of C in CEE 100	<ul style="list-style-type: none"> <li>Complete CEE 100; MAT 242, 266; PHY 121 &amp; 122 each with a minimum grade of "C"</li> </ul>
<b>MAT 242: Elementary Linear Algebra</b>	2	<input type="checkbox"/>		Grade of C	
<b>MAT 266: Calculus for Engineers II</b>	3	<input type="checkbox"/>		Grade of C	
<b>PHY 121/122: University Physics I/Laboratory I (SQ)</b>	3/1	<input type="checkbox"/>		Grade of C	
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: 31-45 CREDIT HOURS</b>					
<b>CEE 210: Engineering Mechanics: Statics</b>	3	<input type="checkbox"/>		Grade of C	<ul style="list-style-type: none"> <li>Complete CEE 210; MAT 267, 275, PHY 131 &amp; 132 each with a minimum grade of "C"</li> <li>Complete First-Year Composition requirement: ENG 101 &amp; 102 or ENG 107 &amp; 108 or ENG 105</li> </ul>
<b>MAT 267: Calculus for Engineers III</b>	3	<input type="checkbox"/>		Grade of C	
<b>MAT 275: Modern Differential Equations (MA)</b>	3	<input type="checkbox"/>		Grade of C	
<b>PHY 131/132: University Physics II: Electricity and Magnetism/ Laboratory II (SQ)</b>	3/1	<input type="checkbox"/>		Grade of C	
<b>TERM FOUR: 46-60 CREDIT HOURS</b>					
<b>CEE 212: Engineering Mechanics: Dynamics</b>	3	<input type="checkbox"/>		Grade of C	<ul style="list-style-type: none"> <li>Complete CEE 212, CEE 213 each with a minimum grade of "C"</li> </ul>
<b>CEE 213: Introduction to Deformable Solids</b>	3	<input type="checkbox"/>		Grade of C	
EEE 202: Circuits I	4	<input type="checkbox"/>			
Humanities, Fine Arts & Design (HU) OR Social & Behavioral Science (SB), AND Cultural Diversity in the US (C) or Global Awareness (G):	3	<input type="checkbox"/>			
Basic Science Elective:	3	<input type="checkbox"/>			
<b>TERM FIVE: 61-75 CREDIT HOURS</b>					
# CEE 384: Numerical Methods for Engineers (CS) Select 3	3	<input checked="" type="checkbox"/>		Grade of C	# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. NOTE: A maximum of two "D" grades are allowed in all 3XX and 4XX courses combined.
# CEE 300: Engineering Business Practice (L) (3 hrs)					
# CEE 321: Structural Analysis and Design (4 hrs)					
# CEE 341: Fluid Mechanics for Civil Engineers (4 hrs)					
# CEE 351: Geotechnical Engineering (4 hrs)					
# CEE 353: Civil Engineering Materials (3 hrs)					
# CEE 361: Introduction to Environmental Engineering (4 hrs)	10-				
# CEE 372: Transportation Engineering (4 hrs)	12	<input checked="" type="checkbox"/>		Grade of C in each	
IEE 380: Probability and Statistics for Engineering Problem Solving	3	<input checked="" type="checkbox"/>			
<b>TERM SIX: 76-90 CREDIT HOURS</b>					
Select remaining 4					# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. NOTE: A maximum of two "D" grades are allowed in all 3XX and 4XX courses combined.
# CEE 300: Engineering Business Practice(L) (3 hrs)					
# CEE 321: Structural Analysis and Design (4 hrs)					
# CEE 341: Fluid Mechanics for Civil Engineers (4 hrs)					
# CEE 351: Geotechnical Engineering (4 hrs)					
# CEE 353: Civil Engineering Materials (3 hrs)					
# CEE 361: Introduction to Environmental Engineering (4 hrs)	14-				
# CEE 372: Transportation Engineering (4 hrs)	16	<input checked="" type="checkbox"/>		Grade of C in each	
<b>TERM SEVEN: 91-105 CREDIT HOURS</b>					
Select 4					# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. NOTE: A maximum of two "D" grades are allowed in all 3XX and 4XX courses combined.
# CEE 281: Surveying (3 hrs)					
# CEE 412: Pavement Analysis and Design (3 hrs) OR # CEE 483: Highway Materials, Construction and Quality (3 hrs)					
# CEE 420: Steel Structures (3 hrs) OR # CEE 421: Concrete Structures (3 hrs)					
# CEE 452: Foundation (3 hrs)					
# CEE 481: Civil Engineering Project (3 hrs)					
# Approved technical elective (3 hrs)	12	<input checked="" type="checkbox"/>		Grade of C in each	
#CEE 400: Earth Systems Engineering and Management (HU, H) OR Social & Behavioral Science (SB) AND Cultural Diversity in the US (C) or Global Awareness (G)	3	<input checked="" type="checkbox"/>		Grade of C in CEE 400	

Course Subject and Title <i>(courses in bold/shading are critical)</i>	Hrs.	Upper Division	Transfer Course/Grade	Minimum Grade if Required	Additional Critical Requirement Notes
<b>TERM EIGHT: 106-120 CREDIT HOURS</b>					
Select remaining 2 # CEE 281: Surveying (3 hrs) # CEE 412: Pavement Analysis and Design (3 hrs) OR # CEE 483: Highway Materials, Construction and Quality (3 hrs) # CEE 420: Steel Structures (3 hrs) OR # CEE 421: Concrete Structures (3 hrs) # CEE 452: Foundation (3 hrs) # CEE 481: Civil Engineering Project (3 hrs) # Approved technical elective (3 hrs)	6	<input checked="" type="checkbox"/>		Grade of C in each	# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. NOTE: A maximum of two "D" grades are allowed in all 3XX and 4XX courses combined.
#CEE 400: Earth Systems Engineering and Management (HU, H) OR Social & Behavioral Science (SB) AND Cultural Diversity in the US (C) or Global Awareness (G) if CEE 400 completed	3	<input type="checkbox"/>		Grade of C in CEE 400	
# CEE 486: Integrated Civil Engineering Design (L)	4	<input checked="" type="checkbox"/>		Grade of C	
Humanities, Fine Arts & Design (HU) AND Cultural Diversity in the US (C) or Global Awareness (G)	3	<input type="checkbox"/>			

**Graduation Requirements Summary:**

Total Hours Regular Curriculum (120)	Total UD Hrs (45 min)	Total Hrs at ASU (30 min)	Cumulative GPA (2.00 minimum)	Major GPA (2.30 Min. CUM GPA in CEE 3XX, 2.30 min CUM GPA in CEE 4XX)	Hrs Resident Credit for Academic Recognition (56 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:**