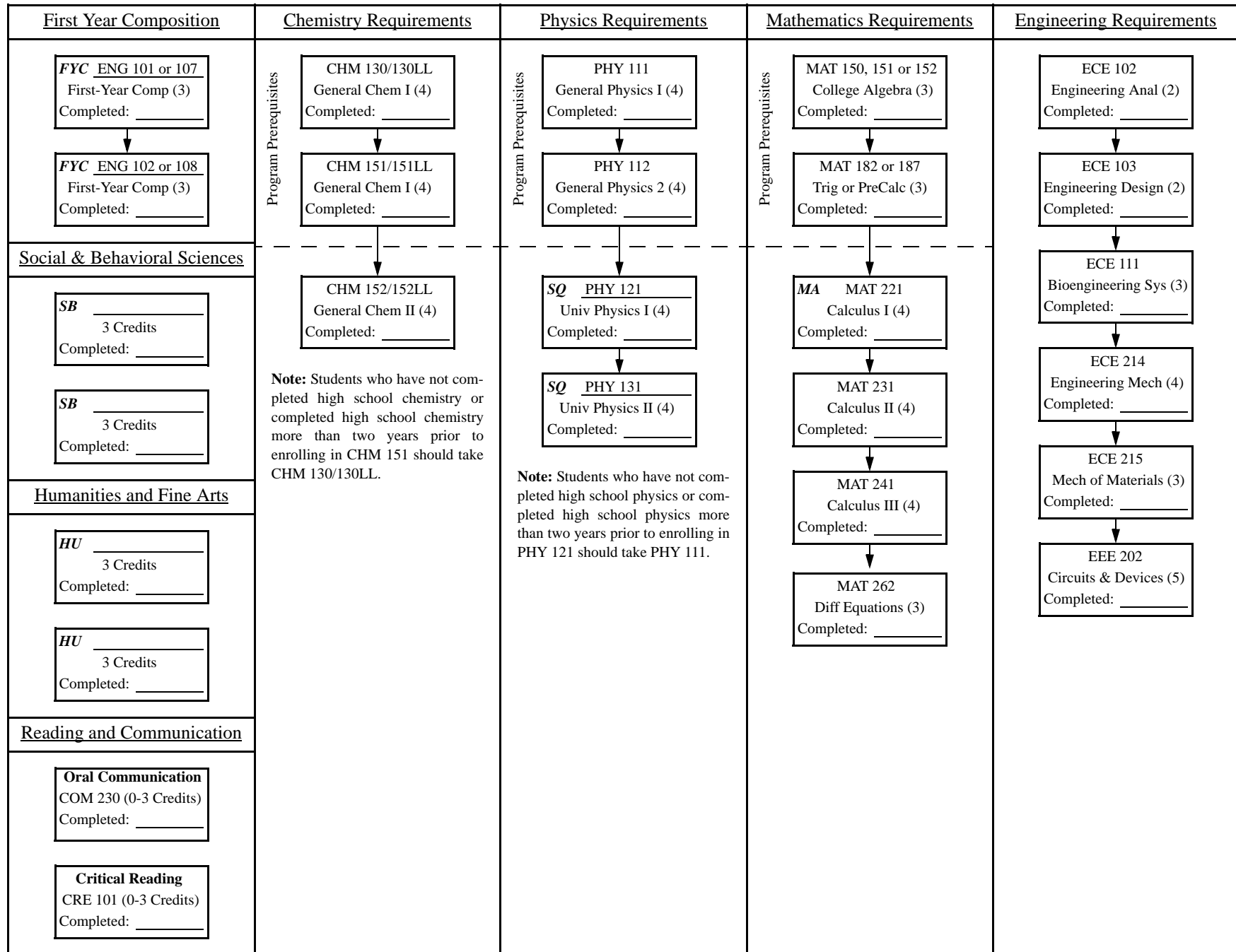




Associate in Science (AS) Degree
MCC/ASU Fulton Mechanical Engineering Advisement Flow Chart
2009-2010 Catalog Year



| 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 |
| TERM ONE: 0-15 CREDIT HOURS | | | | | |
| +ASU 101-FSE: The ASU Experience | 1 | <input type="checkbox"/> | | | |
| CHM 114: General Chemistry for Engineers (SQ) OR CHM 115: General Chemistry with Qualitative Analysis (SQ) OR CHM 116: General Chemistry II* (SQ) | 4 | <input type="checkbox"/> | | Grade of C | <ul style="list-style-type: none"> • Complete CHM 114 or 116 or 115; MAT 265 each with a minimum grade of "C" + ASU 101-FSE and MAE 100 required for freshmen and should be completed first semester. Non-freshmen see advisor for petitioning replacement electives. • An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses • ASU Math Placement Exam score determines placement in Mathematics course *CHM 113 is a prerequisite and does not apply towards degree credit **If ENG 105 a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| +MAE 100: Intro to Mechanical and Aerospace Engineering (or Department Approved Elective) | 2 | <input type="checkbox"/> | | Grade of C in MAE 100 | |
| MAT 265: Calculus for Engineers I (MA) | 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 | |
| Social & Behavioral Science (SB) AND Cultural Diversity in the US (C), Global Awareness (G), or Historical Awareness (H) | 3 | <input type="checkbox"/> | | | |
| TERM TWO: 16-30 CREDIT HOURS | | | | | |
| MAT 266: Calculus for Engineers II | 3 | <input type="checkbox"/> | | Grade of C | <ul style="list-style-type: none"> • Complete MAT 266; PHY 121, 122 each with a minimum grade of "C" |
| PHY 121/122: University Physics I/ Laboratory I (SQ) | 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 | |
| Humanities, Fine Arts & Design (HU) AND Cultural Diversity in the US (C), Global Awareness (G), or Historical Awareness (H) | 3 | <input type="checkbox"/> | | | |
| TERM THREE: 31-45 CREDIT HOURS | | | | | |
| MAE 212: Engineering Mechanics | 4 | <input type="checkbox"/> | | Grade of C | <ul style="list-style-type: none"> • Complete ENG 102 or 108 or 105; MAE 212; MAT 275; PHY 131, 132 each with a minimum grade of "C" • Complete First Year Composition requirement: ENG 101 & 102 or ENG 107 & 108 or ENG 105 |
| MAT 275: Modern Differential Equations | 3 | <input type="checkbox"/> | | Grade of C | |
| PHY 131/132: University Physics II Electricity and Magnetism/ Laboratory II | 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 | |
| TERM FOUR: 46-60 CREDIT HOURS | | | | | |
| MAE 213: Solid Mechanics | 3 | <input type="checkbox"/> | | Grade of C | <ul style="list-style-type: none"> • Complete MAE 213, 240 each with a minimum grade of "C". |
| MAE 240: Thermofluids I | 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 | |
| TERM FIVE: 61-75 CREDIT HOURS | | | | | |
| 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"/> | | | |
| TERM SIX: 76-90 CREDIT HOURS | | | | | |
| MAE 323: Computer-Aided Engineering II | 2 | <input checked="" type="checkbox"/> | | Grade of C | |
| 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 | |
| TERM SEVEN: 91-105 CREDIT HOURS | | | | | |
| MAE 488: Mechanical Engineering Design I | 3 | <input checked="" type="checkbox"/> | | Grade of C | |
| 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"/> | | | |
| TERM EIGHT: 106-120 CREDIT HOURS | | | | | |
| MAE 400: Engineering Profession (L) | 3 | <input checked="" type="checkbox"/> | | Grade of C | See advisor for approved General Electives. |
| 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: