



Transfer Guide
Associate of Engineering with Core 42
BS-Mechanical Engineering
(entering UMKC Fall 2020 or later)



| MCC—Fall Semester 1 | | Hrs | MCC—Spring Semester 1 | | Hrs | MCC—Summer Semester 1 | | Hrs |
|--|---|--|-----------------------|---|-----|-----------------------|--|-----|
| CHEM 111 General College Chemistry I | 5 | CIMM 101 Machine Shop Safety | 1 | COMM 100 Fundamentals of Speech (AE Comm) | 3 | | | |
| ENGL 101 Composition & Reading I | 3 | ENGL 102 Composition & Reading II | 3 | Core 42 Humanities/Arts Requirement | 3 | | | |
| ENGR 101 Intro to Engineering Profession | 1 | MATH 190 Analytic Geometry & Calculus II | 5 | AE History and Social Science Course*** | 3 | | | |
| MATH 180 Analytic Geometry & Calculus I | 5 | PHYS 220 Engineering Physics I | 5 | | | | | |
| AE Humanities Course* | 3 | AE History & Social Sciences Course** | 3 | | | | | |

| MCC—Fall Semester 2 | | Hrs | MCC—Spring Semester 2 | | Hrs | MCC—Summer Semester 2 | | Hrs |
|---|---|---|-----------------------|--|-----|-----------------------|--|-----|
| ENGR 229 Statics | 3 | ENGR 204 Programming for Eng & Sci | 3 | Core 42 Social/Behavioral Sciences Requirement | 3 | | | |
| MATH 210 Analytic Geometry & Calculus III | 5 | ENGR 223 Thermodynamics & Heat Transfer | 4 | Core 42 Humanities/Arts Requirement | 3 | | | |
| PHYS 221 Engineering Physics II | 5 | ENGR 230 Dynamics | 3 | Core 42 Elective | 2 | | | |
| ENGR 215 Engineering Statistics & Computation | 3 | ENGR 240 Mechanics of Materials | 3 | | | | | |
| | | MATH 230 Differential Equations | 3 | | | | | |

| UMKC—Fall Semester 3 | | Hrs | UMKC—Spring Semester 3 | | Hrs | UMKC—Summer Semester 3 | | Hrs |
|---------------------------------------|---|--|------------------------|--|-----|------------------------|--|-----|
| ECE 217 Engineering Computation | 2 | ME 130 Engineering Graphics [^] | 3 | | | | | |
| ME 324/324L Engineering Materials/Lab | 4 | ME 352 Mechanical Instruments Lab | 2 | | | | | |
| ME 351 Fluid Mechanics | 3 | ME 353 Heat Transfer/Fluid Mechanics Lab | 2 | | | | | |
| ME 356 Mechanical Component Design | 3 | ME 380 Manufacturing Methods | 3 | | | | | |
| ME 360 Applied Thermodynamics | 3 | ME 385 System Dynamics | 3 | | | | | |
| | | ME 399 Heat & Mass Transfer | 3 | | | | | |

| UMKC—Fall Semester 4 | | Hrs | UMKC—Spring Semester 4 | | Hrs | UMKC—Summer Semester 4 | | Hrs |
|---|---|---|------------------------|--|-----|------------------------|--|-----|
| CE 320 Engineering Computation & Statistics | 1 | ECE 276 Circuit Theory I [^] | 3 | | | | | |
| ME 492 Mechanical Design Synthesis I | 3 | ECE 277 Circuit Theory I Lab [^] | 1 | | | | | |
| ME 4XX ME Design Elective | 3 | ME 306 Computer Aided Engineering | 3 | | | | | |
| ME 4XX ME Technical Elective | 3 | ME 496WI Mechanical Design Synthesis II | 3 | | | | | |
| ME 4XX ME Technical Elective | 3 | ME 4XX ME Technical Elective | 3 | | | | | |

*Acceptable courses include ART 108, ART 150, ART 151, ENGL 214, ENGL 216, ENGL 240, ENGL 254, ENGL 262, HIST 133, HIST 134, MUSI 108, MUSI 160, PHIL 100, THEA 106

**Acceptable courses include HIST 120, HIST 121, POLS 136

***Acceptable courses include HIST 120, HIST 121, ECON 210, ECON 211, POLS 136

[^] Students may reverse transfer this course back to MCC to complete the Associate of Engineering degree.

Students should consult with an academic advisor to be sure that courses for the MDHE Core 42 satisfy the requirements before enrolling.

UMKC School of Computing & Engineering · SS&C Student Services Center
 336 Flarsheim Hall · 5110 Rockhill Road
 816-235-2399 · sce@umkc.edu · http://sce.umkc.edu

Metropolitan Community College
 Blue River · Longview · Maple Woods · Penn Valley
 816-604-1000 · www.mckc.edu/advising