# Dual Degree Program
## *BS Mathematics*
## *BS Civil Engineering*

| Baker—Fall Semester 1 | Hrs | | Baker—Spring Semester 1 | Hrs | | Baker—Summer Semester 1 | Hrs |
|---|---|---|---|---|---|---|---|
| MA 171 Calculus I | 4 | | MA 172 Calculus II | 4 | | | |
| PC 225 General Physics I | 4 | | PC 226 General Physics II | 4 | | | |
| World Language Requirement | 4 | | Creative Arts Core | 3 | | | |
| BC 110 Freshman Seminar I | 3 | | Social Sciences Core | 3 | | | |
| BK 101 Baker Experience | 1 | | BC 120 Freshman Seminar II | 3 | | | |

| Baker—Fall Semester 2 | Hrs | | Baker—Spring Semester 2 | Hrs | | Baker—Summer Semester 2 | Hrs |
|---|---|---|---|---|---|---|---|
| CH 137/L General Chemistry I/Lab | 4 | | MA 271 Calculus III | 4 | | | |
| CS 175 Introduction to Computer Science | 4 | | MA 221 Statistics I | 3 | | | |
| MA 372 Differential Equations | 3 | | MA 291 Introduction to Higher Mathematics | 3 | | | |
| Creative Arts Core | 3 | | MA 345 Problem Seminar in Mathematics | 3 | | | |
| Humanities Core | 3 | | PC 381 Statics | 3 | | | |

| Baker—Fall Semester 3 | Hrs | | Baker —Spring Semester 3 | Hrs | | MCC—Summer Semester 3 | Hrs |
|---|---|---|---|---|---|---|---|
| MA 281 Linear Algebra | 3 | | Humanities Core | 3 | | CE 276 Strength of Materials* | 3 |
| CS 180 C++ | 2 | | MA 445 Senior Seminar in Mathematics | 3 | | | |
| MA 362 OR MA 383 OR MA 491 | 3 | | Core Capstone | 3 | | | |
| Social Sciences Core | 3 | | 300-400 Level Mathematics Elective | 3 | | | |
| 300-400 Level Mathematics Elective | 3 | | 300-400 Level Mathematics Elective** | 3 | | | |

| UMKC—Fall Semester 4 | Hrs | | UMKC—Spring Semester 4 | Hrs | | UMKC—Summer Semester 4 | Hrs |
|---|---|---|---|---|---|---|---|
| CE 335 Soil Mechanics | 3 | | ME 130 Engineering Graphics | 3 | | | |
| ME 351 Fluid Mechanics | 3 | | CE 378WI Civil Engineering Materials | 3 | | | |
| CE 321 Structural Analysis | 4 | | CE 497 Engineering Hydrology | 3 | | | |
| CE 467 Construction Management | 3 | | CE 323 Structural Steel Design | 3 | | | |
| CE 111 First Year Cornerstone | 1 | | CE 481 Intro to Transportation Engineering | 3 | | | |
| CE 113 Engineering Measurements | 1 | | CE 190 Special Topics | 1 | | | |

| UMKC—Fall Semester 5 | Hrs | | UMKC—Spring Semester 5 | Hrs | | UMKC—Summer Semester 5 | Hrs |
|---|---|---|---|---|---|---|---|
| CE 411 System Design I | 3 | | CE 412 System Design II | 3 | | | |
| CE 432 Foundation Engineering | 3 | | CE 342 Intro to Environmental Engineering | 3 | | | |
| CE 422WI Reinforced Concrete | 3 | | CE Elective | 3 | | | |
| CE Elective | 3 | | | | | | |
| CE Elective | 3 | | | | | | |

* Students will need CE 276 (or equivalent), prior to entering UMKC full-time. If UMKC is not offering this course, in the 3rd summer semester, we can help students enroll elsewhere.

**Students can count an approved 300-400 Math course at BU toward one of the four required upper-level CE electives at UMKC.