# Bachelor of Science in Civil Engineering, 2023-24

For more information about policies and requirements, please see the UMKC 2023-24 Catalog.

**First Year**

<table>
<thead>
<tr>
<th>FALL SEMESTER</th>
<th>HOURS</th>
<th>SPRING SEMESTER</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 266  Accelerated Calculus I</td>
<td>4</td>
<td>MATH 268  Accelerated Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 211/211L General Chemistry I/Lab</td>
<td>5</td>
<td>PHYSICS 240  Physics for Scientists &amp; Engineers I</td>
<td>5</td>
</tr>
<tr>
<td>CIV-ENGR 111  First Year Cornerstone</td>
<td>1</td>
<td>MEC-ENGR 130  Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH 110  English I: Intro Academic Prose</td>
<td>3</td>
<td>ENGLISH 225  English II: Intermed Academic Prose</td>
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<tr>
<td>GEFSE 101  First Semester Experience</td>
<td>3</td>
<td>GECRT-SS Critical Thinking in Behavioral &amp; Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16</strong></td>
<td><strong>TOTAL</strong></td>
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**Second Year**

<table>
<thead>
<tr>
<th>FALL SEMESTER</th>
<th>HOURS</th>
<th>SPRING SEMESTER</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 250  Calculus III</td>
<td>4</td>
<td>MATH 345/345L Ordinary Differential Equations/Lab</td>
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<tr>
<td>PHYSICS 250  Physics for Scientists &amp; Engineers II</td>
<td>5</td>
<td>CIV-ENGR 190  Special Topics</td>
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<tr>
<td>CIV-ENGR 113  Engineering Measurements</td>
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<td>CIV-ENGR 276  Strength of Materials</td>
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<tr>
<td>CIV-ENGR 275  Engineering Statics (Meets GECRT-SC req)</td>
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<td>CIV-ENGR 351  Fluid Mechanics</td>
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<tr>
<td>E&amp;C-ENGR 216  Engineering Computation</td>
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<td>Communication Requirement (COMM-ST 110, 140, 212 or 277)</td>
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<tr>
<td>GECRT-AH  Critical Thinking in Arts &amp; Humanities</td>
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<td><strong>TOTAL</strong></td>
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**Third Year**

<table>
<thead>
<tr>
<th>FALL SEMESTER</th>
<th>HOURS</th>
<th>SPRING SEMESTER</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Science Requirement (GEOLOGY 220 or BIOLOGY 108 recommended)</td>
<td>3</td>
<td>CIV-ENGR 323  Structural Steel Design*</td>
<td>3</td>
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<tr>
<td>STAT 235  Elementary Statistics</td>
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<td>CIV-ENGR 378WI  Civil Engineering Materials**</td>
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<tr>
<td>CIV-ENGR 321  Structural Analysis</td>
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<td>CIV-ENGR 497  Engineering Hydrology</td>
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<tr>
<td>CIV-ENGR 335  Soil Mechanics</td>
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<td>Constitution Requirement (HIST 101 OR 102; POL-SCI 210, CJC 364, or HON 230)</td>
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<tr>
<td>CIV-ENGR 467  Construction Management</td>
<td>3</td>
<td>GECDV  Culture &amp; Diversity</td>
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<td><strong>TOTAL</strong></td>
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**Fourth Year**

<table>
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<tr>
<th>FALL SEMESTER</th>
<th>HOURS</th>
<th>SPRING SEMESTER</th>
<th>HOURS</th>
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</thead>
<tbody>
<tr>
<td>CIV-ENGR 411  System Design I</td>
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<td>CIV-ENGR 412  System Design II (Meets GECUE req)</td>
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<tr>
<td>CIV-ENGR 422WI  Reinforced Concrete</td>
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<td>CIV-ENGR 481  Intro to Transportation*</td>
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<tr>
<td>CIV-ENGR 432  Foundation Engineering</td>
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<td>CIV-ENGR 342  Intro to Environmental Engineering**</td>
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<tr>
<td>CIV-ENGR  Elective</td>
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<td><strong>TOTAL</strong></td>
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Additional Graduation Requirements: Civics Exam, OSHA 10-Hour Training, HEIGHTEN Exit Exam.

Total Credits to Graduate: 127

*These courses can be interchanged between Spring semesters.

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CIV-ENGR Elective Interest Areas: Structural; Water Resources; Geotechnical & Materials; Construction Management; General.