**General Requirements**

Valid Missouri Teaching Certification

Two-Years of Mathematics Teaching Experience

**A. Professional Requirements (Minimum of 24 semester hours)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCH ED 6271</td>
<td>Tchg Lrng Number &amp; Oper Adv Pers</td>
<td>0.5</td>
</tr>
<tr>
<td>TCH ED 6272</td>
<td>Tchg Lrng Rational Numb Adv Pers</td>
<td>0.5</td>
</tr>
<tr>
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<tr>
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<td>Tchg Lrng Geom &amp; Meas Adv Pers</td>
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</tr>
<tr>
<td>TCH ED 6276</td>
<td>Tchg Data Analysis &amp; Math Modeling</td>
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**1. Mathematical Content Knowledge**

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**b. Specialized Mathematics Knowledge of Teaching-Mathematics that relates to helping student understand school mathematics, often referred to as Mathematics Knowledge for Teaching (MKT)**

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**2. Pedagogical Content Knowledge (PCK) for Mathematics**

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**b. Effective teaching strategies for supporting mathematics learning**

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<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
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**c. Curriculum trajectories, materials, standards and methods for aligning curriculum systems**

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<tbody>
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**d. Evaluation of mathematical abilities and achievement including formal and informal diagnostic procedures and in prescriptive instruction**

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3. Foundations of Leadership

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<tr>
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<th>Semester Hours</th>
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<tbody>
<tr>
<td>a. TCH ED 6277</td>
<td>Effective communication strategies within and outside school</td>
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<td>TCH ED 6278</td>
<td></td>
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<tr>
<td>b. TCH ED 6277</td>
<td>Professional development expertise ability to plan, develop, implement and evaluate learning environments for teachers</td>
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<tr>
<td>TCH ED 6278</td>
<td></td>
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</tr>
<tr>
<td>c. TCH ED 6278</td>
<td>Ability to establish and nurture professional communities of learners-students, parents, and educators</td>
<td>1.0</td>
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<tr>
<td>d. TCH ED 6278</td>
<td>Informed about and contribute to policy and professional organization work related to teaching and learning mathematics</td>
<td>1.0</td>
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</table>

4. Culminating Clinical Experience (Three semester hours of experience working with a full range of students and educators in various professional development settings)

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<tr>
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<th>Semester Hours</th>
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<tbody>
<tr>
<td>TCH ED 6281</td>
<td>Internship Numb &amp; Oper Elem Schls</td>
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<tr>
<td>TCH ED 6282</td>
<td>Internship Rational Numbers Elem Schls</td>
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<tr>
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<td>Internship Geom &amp; Meas Elem Schls</td>
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Professional Requirements - Total Semester Hours: 24.0