## TEACHING, LEARNING AND LEADERSHIP: MATHEMATICS/SCIENCE EDUCATION, MS

### Requirements for Students Matriculating in or before Academic Year 2021-2022.

Learn more about Graduate College Academic Regulation 7.0 (http://catalog.okstate.edu/graduate-college/#70).

**Total Hours: 36**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>CIED 5053</td>
<td>Curriculum Issues</td>
<td>3</td>
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<tr>
<td>CIED 5813</td>
<td>Educational Advocacy and Leadership</td>
<td>3</td>
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<tr>
<td></td>
<td><strong>Hours Subtotal</strong></td>
<td><strong>6</strong></td>
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### Research Requirement

Select 6 hours from the following:

- CIED 5073 Pedagogical Research
- MATH 5913 Introduction to Research in Mathematics Education
- REMS 5013 Research Design and Methodology
- REMS 5953 Statistical Methods in Education
- STAT 5013 Statistics for Experimenters I
- SCFD 5913 Introduction to Qualitative Inquiry

**Hours Subtotal** 6

### Program Core

- SMED 5750 Seminar in Mathematics Education 3
- SMED 5193 Inquiry and Problem-Based Learning in Science Education 3
- SMED 5913 Teaching Geometry and Spatial Visualization
- SMED 5923 Teaching Algebra and Mathematical Tasks
- SMED 5933 Teaching Data and Probability in Schools
- SMED 5943 Mathematics Leadership and Coaching

**Hours Subtotal** 6

### Areas of Emphasis

Select 12 hours

**Hours Subtotal** 12

### Elective or Thesis

Select 6 hours

- SMED 5050 Seminar in Integrated Mathematics and Science Applications
- SMED 5193 Inquiry and Problem-Based Learning in Science Education
- SMED 5223 Teaching Science in the Schools
- SMED 5243 Environmental Education in the Curriculum
- SMED 5253 Teaching Rational Number Concepts, Proportional Reasoning, and Classroom Interactions
- SMED 5263 Assessment and Evaluation in School Mathematics
- SMED 5270 Practicum in School Mathematics
- SMED 5273 Number Concepts and Assessment at the Elementary Level (PK-6)
- SMED 5280 Workshop in Science Education
- SMED 5283 Problem-Centered Learning in Mathematics

**Total Hours** 36

**Graduate College Master's Program Requirements**

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (http://catalog.okstate.edu/graduate-college/). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.