

Middle Grades Mathematics (6-9) Background Requirements

6 key courses

Candidates should have at least a bachelor's degree with a major or minor in mathematics and coursework in the competency areas below. Candidates with a major in mathematics will satisfy any background deficiencies through graduate courses which apply to the M.A.T. Candidates with degrees in other fields will complete the minor and make up deficiencies with undergraduate coursework outside the 39-hour graduate program. The GPA for background requirements must be at least a 2.75, and no courses may be presented for licensure with grades lower than a C.

| Competency Area | Course requirements and UNC Charlotte examples There must be at least one course in each cell unless otherwise noted | Candidate's courses | Grades | Plan for satisfying deficiencies |
|-----------------------------------|--|---------------------|--------|----------------------------------|
| Linear or Abstract Algebra | <i>A broad-based conceptual course above the 1000 level that includes algebraic content, e.g.,</i> MATH 2340: Number Concepts and Relationships <p style="text-align: center;"><u>AND</u></p> <i>Algebra above the introductory level, e.g.,</i> MATH 2164: Matrices and Linear Algebra MATH 2341: Algebra and Algebraic Structures | | | |
| Geometry | <i>A geometry course above the 1000 level, e.g.,</i> MATH 2343: Geometry and Measurement | | | |
| Statistics | <i>Any statistics course, e.g.,</i> STAT 1222: Introduction to Statistics STAT 2122: Introduction to Probability and Statistics | | | |
| Discrete Mathematics | <i>A course focused on discrete mathematics, e.g.,</i> MATH 1102: Introduction to Mathematical Thinking MATH 1165: Introduction to Discrete Structures | | | |
| Calculus | <i>Introductory calculus, e.g.,</i> MATH 1120: Calculus MATH 1241: Calculus I | | | |

Note: Some deficiency courses may have prerequisites.

Requirements for the minor in mathematics: 18 hours, including the following:

- MATH 1241, 1242, and either 2164 or 2171 (9 hours);
- one course chosen from MATH 2241, 2242, 2164, 2171, STAT 2122, OPRS 2111, or any 3-hour MATH/STAT/OPRS course at the 3000 level or above (3 hours)
- two 3-hour MATH/STAT/OPRS courses at the 3000 level or above (6 hours).

Candidates should choose courses for the minor that also satisfy deficiencies above.