Mathematics (5-12) Teaching Licensure Program ..... St. Olaf College

General Requirements, Professional Education **Course Credit**

Education 231 – Drugs and Alcohol 0
Education 291 – Standards and Technology 0
Education 290 – Educational Psychology 1
Education 330 – Principles of Secondary Education 1
Education 350 – Teaching of Mathematics 1
Education 372 – Communication and Counseling in the Schools 1/2
Education 375 – Exceptional Child 1/2
Education 381* – Senior Seminar 1/2
Education 382* – Human Relations Component 0
Education 385* – Human Issues in Education 1/2
Education 389* – Student Teaching 3

**Courses to be taken during the student teaching semester*

Mathematics Major Requirements

- Mathematics 120 (122) – Calculus I 1
- Mathematics 126 (128) – Calculus II 1
- Mathematics 220 – Elementary Linear Algebra 1
- Mathematics 232 – Discrete Mathematics 1

  May be satisfied by Math 364 or other approved course.
- Mathematics 244 – Elementary Real Analysis 1
- Mathematics 252 – Abstract Algebra 1
- Mathematics 262 – Probability Theory 1
- Mathematics 356 – Geometry 1
- Statistics 272 – (Statistical Modeling) 1

  OR

  Statistics 322 (Statistical Theory) OR Statistics 212 (Statistics for Science)
- Course satisfying applied requirement for mathematics major (Statistics 272 or 322 count here) 1
- Mathematics electives to total seven course above Math 220 to satisfy the mathematics major 0-1
- Math Ed Portfolio 0

  Documentation of learning and accomplishment in areas required by the MN Board of Teaching and NCATE, such as oral communication, history of mathematics, independent learning, mathematics used in other disciplines.

The above requirements should be incorporated into an approved mathematics contract. The contract should normally be developed near the end of the sophomore year but may be altered by the mutual agreement of the student and the mathematics department chair at any time after contract approval.

Recommended Supporting Courses:

Mathematics 224 – Investigative Mathematics
Mathematics 226 – Multivariable Calculus
Mathematics 230 – Intro to Differential Equations
Mathematics 234 – Structure of Higher Mathematics
Mathematics 238 – Elementary Number Theory
Mathematics 266 – Operations Research
Mathematics 390 – Mathematics Practicum

Computer Science 121 (172) – Principles of Computer Science
Philosophy 240 – Formal Logic and Philosophy
Physics 124-125 or 126-127-128 Principles of Physics or Analytical Physics
Economics 221 - Analytical Principles of Economics

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