# Bachelor of Science in Mathematics Education

**Wright State Core – 42 hours**

### Element 1 Communications
- ENG 1100 Academic Writing and Reading
- ENG 2100 Research and Argument

### Element 2 Mathematics
- MTH 2300 Calculus I

### Element 3 Global Traditions
Choose one interdisciplinary course:
- AFS 2000 (IW, MC)
- ATH 2500
- CS 1000
- CST 2210 (IW, MC)
- CST 2310 (IW, MC)
- CST 2320 (IW, MC)
- CST 2410 (MC)
- CST 2420 (IW, MC)

Choose one History course:
- CLS 1500
- HST 1100
- HST 1200

### Element 4 Arts/Humanities
Choose one course:
- ART 2140
- CLS 2040 (IW)
- CST 2210 (IW, MC)
- CST 2310 (IW)
- CST 2420 (IW)
- ENG 2040 (IW)
- ENG 2050 (IW, MC)
- MUS 1210
- MUS 2140
- MUS 2900 (IW, MC)

### Element 5 Social Science
Choose two (2) courses from different disciplines
- ATH 2200
- EC 2500 (IW, MC)
- EC 2000 (IW)
- EC 2040
- EC 2050
- EC 2100
- ED 2650
- EC 2040
- EC 2900 (IW, MC)
- FIN 2050
- PLS 2000
- PSY 1010

### Element 6 Natural Science
- PHY 2400/2400L
- PHY 2410/2410L

### Additional Core Courses
- MTH 2310 Calculus II

### Multicultural Competence
- Two Multicultural Competence (MC) courses from the Wright State Core, Study Abroad, or Service Learning courses

### Writing Across the Curriculum
- Two Integrated Writing (IW) courses from the Wright State Core.

## Departmental Requirements – 46 hours

### Required Core Courses (19 - 20 hours)
- MTH 2320 Calculus III (4 hours)
- MTH 2330 Differential Equations (4 hours)
- MTH 2340 Differential Equations w/ Matrix Algebra (4 hours)
- MTH 2530 Elementary Linear Algebra (3 hours)
- MTH 2800 Writing Mathematical Proofs (3 hours)
- MTH 4310 Real Variables I (3 hours)
- MTH 4510 Modern Algebra I (3 hours)

### Electives (27 hours)
- MTH 3100 Mathematical Modeling in the Behavioral Sciences
- MTH 3450 Geometry for Middle School Teachers
- MTH 4400 History of Mathematics
- MTH 4710 Geometry
- MTH 4910 High School Mathematics from an Advanced Perspective
- STT 3420 Probability and Statistics for Middle School Teachers
- STT 3600 Applied Statistics I

### Related Course Requirements – 11 hours
- ED 2600
- ED 2700
- ED 2900

### General Electives – 23 hours
- Choose from the Wright State University Undergraduate Catalog

### Department Approved Elective Courses
- MTH 3060 Mathematical Modeling (3 hours)
- MTH 3260 Numerical Methods (3 hours)
- MTH 3320 Complex Variables (3 hours)
- MTH 3330 Partial Differential Equations (3 hours)
- MTH 4070 Optimization Techniques (3 hours)
- MTH 4150 Introduction to Scientific Computation (3 hours)
- MTH 4240 Coding Theory (3 hours)
- MTH 4260 Matrix Computations (3 hours)
- MTH 4290 Cryptography and Data Security (3 hours)
- MTH 4320 Real Variables II (3 hours)
- MTH 4520 Modern Algebra II (3 hours)
- MTH 4550 Advanced Linear Algebra (3 hours)
- MTH 4570 Combinatorics and Graph Theory (4 hours)
- MTH 4810 Applied Mathematics I (3 hours)
- MTH 4820 Applied Mathematics II (3 hours)
- MTH 4920 Undergraduate Mathematics Seminar (3 hours)
- STT 3610 Applied Statistics II (3 hours)
- STT 4610 Theory of Statistics I (4 hours)
- STT 4620 Theory of Statistics II (4 hours)
- STT 4660 Statistical Methods I (4 hours)
- STT 4670 Statistical Methods II (4 hours)