SECONDARY EDUCATION: MATHEMATICS, BS

Degree Programs

Requirements for Students Matriculating in or before Academic Year 2022-2023. Learn more about University Academic Regulation 3.1 (http://catalog.okstate.edu/university-academic-regulations/#matriculation).

Minimum Overall Grade Point Average: 2.50
Total Hours: 120

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<th>Code</th>
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| General Education Requirements

- **English Composition**
  - See Academic Regulation 3.5 (http://catalog.okstate.edu/university-academic-regulations/#english-composition)
  - ENGL 1113  Composition I 1  3
  - or ENGL 1313  Critical Analysis and Writing I  3
  - Select one of the following:  3
    - ENGL 1213  Composition II 1  1
    - ENGL 1413  Critical Analysis and Writing II 1  1
    - ENGL 3323  Technical Writing 1  1

- **American History & Government**
  - Select one of the following:  3
    - HIST 1103  Survey of American History  3
    - HIST 1483  American History to 1865 (H)  3
    - HIST 1493  American History Since 1865 (DH)  3
  - POLS 1113  American Government  3

- **Analytical & Quantitative Thought (A)**
  - MATH 2144  Calculus I (A) 1, 2  4
  - Select 3 hours from the following:  3
    - CS 1103  Computer Programming (A) 1, 2  1
    - CS 1113  Computer Science I (A) 1, 2  1

- **Humanities (H)**
  - Course designated (H)  6

- **Natural Sciences (N)**
  - Courses designated (N) with one (L)
    - PHYS 1114  College Physics I (LN)  4
    - or PHYS 2014  University Physics I (LN)  4
  - PHYS 1214  College Physics II (LN)  4
  - or PHYS 2114  University Physics II (LN)  4

- **Social & Behavioral Sciences (S)**
  - Courses designated (S)  3

- **Additional General Education**
  - Courses designated (A), (H), (N), or (S)  4

- **Hours Subtotal**: 40

- **Diversity (D) & International Dimension (I)**
  - May be completed in any part of the degree plan
  - Select at least one Diversity (D) course
  - Select at least one International Dimension (I) course

- **College/Departmental Requirements**

- **Hours Subtotal**: 10

- **Major Requirements**
  - Minimum GPA 2.50 with a minimum grade of “C” or “P” in each course in the emphasis area and those with 1, 2 footnote.
  - Calculus, Abstract Algebra, Geometry
    - MATH 2153  Calculus II (A)  3
    - MATH 2163  Calculus III  3
    - MATH 3613  Introduction to Abstract Algebra  3
    - MATH 4403  Geometry  3
  - Differential Equations, Linear Algebra, Modern Analysis, Combinatorial Math, Number Theory
    - MATH 2233  Differential Equations  3
    - MATH 3013  Linear Algebra (A)  3
    - MATH 4023  Introduction to Analysis  3
    - MATH 4663  Combinatorics  3
  - Select one of the following:  3
    - MATH 4713  Number Theory  3
    - MATH 4753  Introduction to Cryptography  3
    - MATH 4813  Groups and Representations  3

- **History, Mathematical Modeling, Research**
  - MATH 3303  Advanced Perspectives on Functions and Modeling for Secondary Teachers  3
  - MATH 3933  Research Methods  3
  - MATH 4033  History of Mathematics  3

- **Statistical Methods**
  - STAT 4013  Statistical Methods I (A)  3
  - or STAT 4053  Statistical Methods I for the Social Sciences (A)  3
  - Select 3 hours of 4000-level MATH or STAT or upper-division CS or PHYS  3

- **Hours Subtotal**: 42

- **Professional Core Requirements**
  - Minimum GPA 2.50 with a minimum grade of “C” or “P” in each course

- **CIED 4720**  Internship in the Secondary Classroom 3  6
- **SMED 1012**  Inquiry Approaches to Teaching  2
- **SMED 3013**  Knowing and Learning in Mathematics and Science  3
- **SMED 4003**  Teaching Fundamental Concepts of Mathematics 3  3
- **SMED 4013**  Classroom Interactions 3  3
- **SMED 4023**  Problem-Based Learning in Mathematics and Science 3  3
- **SMED 4053**  Teaching Geometry in the Secondary School 3  3
- **SMED 4723**  Senior Seminar in Secondary Mathematics and Science Education 3  3
- **SPED 3202**  Educating Exceptional Learners (D)  2

- **Hours Subtotal**: 28

- **Total Hours**: 120
Minimum grade of "C"

Included in the Major Requirements when calculating Major GPA

Full admission to Professional Education required

Other Requirements

- 40 hours of upper-division coursework.
- Required for graduation and recommendation for Standard Certification:
  a. 2.50 Overall GPA;
  b. 2.50 GPA in Major Requirements and specified general education courses; and
  c. 2.50 GPA in Professional Core Requirements.
- The student must earn minimum grades of "C" or "P" in each course in the Major Requirements and Professional Core Requirements and must earn grades of "P" in all sections of observation courses and student teaching for recommendation for Certification.
- Students must demonstrate proficiency in a foreign language at the novice high level from among those languages identified by the Office of Educational Quality and Accountability. For clarification see OSU academic advisor. This proficiency can be demonstrated by presenting a high school transcript which demonstrates two years of study of a single foreign language with grades of "B" or better. Or, students may complete 3 hours college credit in a single language with no grade below C (or pass an advanced standing examination, College Level Examination Program (CLEP) exam, or Oral Proficiency Interview developed by the American Council on the Teaching of Foreign Languages, equivalent to 3 hours of college credit.) Students whose primary language is other than English may document proficiency in English as their second language with a score of 550 or more on the Test of English as a Foreign Language. Or, students may meet the requirement by transfer of documentation of meeting the foreign language competency from one of the teacher education programs in the State of Oklahoma approved by the Oklahoma State Regents for Higher Education.

Additional State/OSU Requirements

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2028.