



UNDERGRADUATE AND TEACHER EDUCATION

SCHOOL OF EDUCATION
Bloomington

B.S. EDUCATION: MATHEMATICS

This Bachelor of Science in Education degree enables you to teach Middle School/Junior High or High School students. Course requirements for this program are valid at IUB as reflected in the School of Education Bulletin. A four-year college plan requires completion of 15 credits each semester. A 2.5 GPA overall is required for retention and graduation. A total of 120 credits are required for graduation.

May 2023

PREREQUISITES FOR ADMISSION TO THE TEP

Competitive enrollment. Meeting minimum requirements does not guarantee enrollment in authorized courses.

- 2.5 GPA overall.
- 21 credits and a 2.0 GPA in the content field with at least 15 credits completed and 6 credits in progress. Grade of C minus (C-) or higher is required in each content field course.
- Completion of or enrollment in prerequisites. Grade of C or higher is required in each professional EDUC course.

Course		Credits
• EDUC-G 203	Communication for Youth Serving Professionals (S&H)	3
• EDUC-M 300	Teaching in a Pluralistic Society (P: English Comp.) (D)	3
• EDUC-I 251	Learning Theories for Teachers AND	3
• EDUC-M 101	Lab/Field Experience	1
To enroll in I251 and M101, you must register for EDUC-BC 251.		
• EDUC-P 313	Adolescents in a Learning Community (P: Soph. status)	3
• EDUC-W 200	Using Computers in Education (IF)	3
4.	Apply to TEP by October 1 to enroll in Spring term Block I and EDUC-K 306.	
5.	Access TEP Application at: https://education.indiana.edu/	

I. IUB & SCHOOL OF EDUCATION GENERAL EDUCATION REQUIREMENTS

<https://gened.indiana.edu/approved-courses/index.html>

Careful selection & completion of courses with a grade of "C" or higher may allow double counting within General Education, Professional Education &/or Content Field. If you earn a grade lower than a C, please consult with an academic advisor.

English Composition (EC) (Select one) 0-3 credits

Grade of C or higher required

CMLT-C 110	Writing the World	3
ENG-W 131	Reading, Writing & Inquiry I OR	3
ENG-W 131EX	Elementary Composition-Exempt	0
ENG-W 170	Intro to Argumentative Writing-Projects in Reading & Writing	3

Intensive Writing Course (IW) (Select one) 3 credits

EDUC-H 205	Intro to Educational Thought (P: English Comp.) (S&H)	3
EDUC-H 340	Education & American Culture (P: Soph. status)	3

Mathematical Modeling (MM) 3-4 credits

Complete at least 1 course for at least 3 credits.

• _____

Arts & Humanities (A&H) 6 credits

Complete at least 2 courses for a total of at least 6 credits.

• _____ • _____

Social & Historical Studies (S&H) 6 credits

Complete at least 2 courses for a total of at least 6 credits.

• _____ • _____

Natural & Mathematical Sciences (N&M) 5+ credits

Complete ONE of the following options.

Option I: Complete at least 2 courses for a total of at least 5 credits. At least 1 of these courses must be a Natural Science (*) course.

• _____ • _____

Option II: Complete a 5 credit science course.

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(The class taken to fulfill the Mathematical Modeling requirement cannot be counted towards the 5+ credits needed to fulfill the N&M requirement.)

World Languages (WL)/World Cultures (WC) 6 credits

Complete ONE of the following options.

Option I: Language Study (WL): Complete the study of an approved single language through the second semester of the second-year level of college-level coursework.

• _____ • _____

Option II: World Culture (WC): Complete at least 2 courses for a total of at least 6 credits.

• _____ • _____

Option III: International Experience (IE): Complete an approved study abroad program or internship of at least 6 credits & at least 6 weeks abroad in duration.

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Information Fluency (IF) 3 credits

EDUC-W 200	Using Computers in Education	3
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Diversity in the U. S. (D) 3 credits

EDUC-M 300	Teaching in a Pluralistic Society (P: English Comp.)	3
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Sustainability Literacy (SL) 3 credits

EDUC-M 469	Content Area Literacy	
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Enriching Educational Experiences (EEE) 12 credits

EDUC-M 480	Student Teaching: Secondary (12 weeks)	12
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II. PROFESSIONAL EDUCATION**51 credits/2.5 GPA**

A grade of C or higher is required in each professional EDUC course.
The following courses must be successfully completed before student teaching.

22 credits

EDUC-G 203	Communication for Youth Serving Professionals (S&H)	3
EDUC-M 300	Teaching in a Pluralistic Society (P: English Comp.) (D)	3
EDUC-I 251	Learning Theories for Teachers AND	3
EDUC-M 101	Lab/Field Experience	1
To enroll in I251 and M101, you must register for EDUC-BC 251.		
EDUC-P 313	Adolescents in a Learning Community (P: Soph. status)	3
EDUC-W 200	Using Computers in Education (IF)	3
EDUC-A 308	Legal & Ethical Issues in Education (P: Soph. status)	3
EDUC-H 205	Intro to Educational Thought (P: English Comp.) (S&H) (IW) OR	3
EDUC-H 340	Education & American Culture (P: Soph. status) (IW)	

Admission to the Teacher Education Program (TEP) is required in order to enroll in the following courses: 29 credits

EDUC-K 306	Teaching Students with Special Needs: Secondary Classrooms	3
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Courses must be taken in prescribed blocks. Successful completion (C or higher) of all courses in each block is a prerequisite for the next block and student teaching.

Block I and Block II must be completed in sequence from one semester to the next. Students may add an additional semester(s) between the completion of Block II and Student Teaching (Block III).

Block I (Spring only) 8 credits

EDUC-M 321	Secondary School Mathematics Curriculum & Assessment	3
EDUC-M 303	Field Experience I	2
EDUC-M 469	Content Area Literacy (SL)	3

Block II (Fall only) 6 credits

EDUC-M 422	Teaching Mathematics in the Secondary School	3
EDUC-M 403	Field Experience II	2
EDUC-S 303	Classroom Management	1

Block III (Student Teaching) 12 credits

Students may not enroll in other classes while completing student teaching. **Exception: EDUC-M 202 Job Search Strategies for Educators**

EDUC-M 420	Student Teaching Seminar	1
EDUC-M 480	Student Teaching in the Secondary School (12 weeks) (EEE)	11

III. MATHEMATICS CONTENT**42 credits/2.0 GPA**

A grade of C minus (C-) or higher is required in each course.
Check with the department regarding when courses will be offered.

Analysis 12 credits

MATH-M/S 211	Calculus I (MM)	4
MATH-M/S 212	Calculus II (P: MATH-M/S 211) (N&M)	4
MATH-M/S 311	Calculus III (P: MATH-M/S 212)	4

Algebra 9 credits

MATH-M 301	Linear Algebra and Applications (P: MATH-M/S 212; or both MATH-M 211 and CSCI-C 241) OR	3
MATH-M/S 303	Linear Algebra for Undergraduates (P: MATH-M/S 212; or both MATH-M 211 and CSCI-C 241)	3
MATH-M 391	Introduction to Mathematical Reasoning (P: MATH-M/S 212; or both MATH-M 211 and CSCI-C 241; and MATH-M 301 or MATH-M/S 303) (Spring)	3
MATH-M/S 403	Introduction to Modern Algebra (P: MATH-M 301 or M/S 303) (Fall) OR	3
MATH-T 403	Modern Algebra for Secondary Teachers (P: MATH-M 301 or M/S 303; and MATH-M 391) (Fall)	3

Probability & Statistics 3 credits

MATH-M 365	Introduction to Probability and Statistics (P: MATH-M/S 212)	3
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Geometry 3 credits

MATH-T 336	Topics in Euclidean Geometry (P: MATH-M/S 212) (Fall)	3
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Applied Mathematics 3 credits

MATH-M 447	Mathematical Models and Applications I (P: MATH-M 301 or MATH-M/S 303; and MATH-M/S 311. P or C: MATH-M 365) (Fall)	3
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Computer Programming 3 credits

MATH-M 371	Elementary Computational Methods (P: MATH-M/S 212) (Spring)	3
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Math in Secondary Curriculum 3 credits

EDUC-M 302	Algebra Throughout the Sec. Curriculum (P: MATH-M 301 or MATH-M/S 303) (C: MATH-T 403) (Fall)	1
EDUC-M 302	Calculus Throughout the Sec. Curriculum (C: MATH-M/S 212) (Spring)	1
EDUC-M 302	Probability & Statistics Throughout the Sec. Curriculum (C: MATH-M 365) (Spring)	1

Electives to total 42 credits

Program must include **at least one** of the following:

MATH-M 321	Intuitive Topology (P: MATH-M/S 212) (Fall)	3
MATH-M/S 343	Introduction to Differential Equations with Applications I (P: MATH-M/S 212, R: MATH-M 301 or MATH-M/S 303)	3
MATH-M 380	History of Mathematics (P: MATH-M/S 212)	3
MATH-M 405	Number Theory (P: MATH-M/S 212) (Spring, odd years)	3
MATH-M/S 413	Introduction to Analysis I (P: MATH-M 301 or MATH-M/S 303; and MATH-M/S 311) (Fall)	3

Select any other mathematics course at the 300 level or above, but the following are recommended:

MATH-M 330	Exploring Mathematical Ideas (P: MATH-M/S 211)	3
MATH-M 415	Elementary Complex Variables with Applications (P: MATH-M/S 311) (Spring)	3
MATH-M 453	Cryptography (P: MATH-M 301 or MATH-M/S 303) (Spring, odd years)	3

IV. ELECTIVES (To total 120 credits)