

Mathematics Education

License: Mathematics

Grade Level 5-12 REPA 3

Purdue University Course Catalog 2023-2024

Credit Hours 43-47

CONTENT

Overall GPA for Mathematics courses within the Departmental/Program major must be at least 2.50/4.00

MA	35100	Elementary Linear Algebra	3
MA	36600	Ordinary Differential Equations	4
MA	37500	Introduction to Discrete Mathematics	3
MA	46000	Geometry	3
MA	48400	Seminar on Teaching College Algebra and Trigonometry ¹	3
STAT	31100	Introductory Probability	3
STAT	35000	Introduction to Statistics ¹	3
<i>Select one</i>			
MA	30100	An Introduction to Proof Through Real Analysis OR	3
MA	34100	Foundations of Analysis	3
<i>Select one</i>			
MA	45000	Algebra (Honors) OR	3
MA	45300	Elements of Algebra I	3
<i>Select one</i>			
CS	15900	Programming Applications for Engineers OR	3
CS	17600	Data Engineering in Python OR	3
CS	17700	Programming with Multimedia Objects OR	4
CS	18000	Problem Solving and Object-Oriented Programming	4
<i>Select one</i>			
MA	16100	Plane Analytic Geometry and Calculus I OR	5
MA	16500	Analytic Geometry and Calculus I	4
<i>Select one</i>			
MA	16200	Plane Analytic Geometry and Calculus II OR	5
MA	16600	Analytic Geometry and Calculus II	4
<i>Select one</i>			
MA	26100	Multivariate Calculus OR	4
MA	27101	Honors Multivariate Calculus	5

¹ The higher grade between STAT 35000 or MA 48400 is used toward content GPA.

Credit Hours**44****PROFESSIONAL EDUCATION**

All Professional Education courses, including University Concentrations courses, are calculated into the Professional Education GPA. Professional Education GPA must be 3.00/4.00 with no grade lower than a C.

Required for TEP Admission

EDCI	20500	Exploring Teaching as a Career	2
EDCI	28500	Multiculturalism and Education	2
EDST	20010	Educational Policies and Laws	1

Core Courses

EDCI	27000	Introduction to Education Technology and Computing	1
EDCI	22550	Mathematics Education Seminar	1
EDCI	30900	Reading in Middle and Secondary Schools: Methods and Problems	1
EDCI	35000	Community Issues and Applications for Educators	1
EDCI	37001	Teaching and Learning English as a New Language	2
EDPS	23500	Learning and Motivation	2
EDPS	24000	Children with Gifts, Creativity, and Talents	1
EDPS	24800	Differentiating Curriculum and Instruction	1
EDPS	26501	The Inclusive Classroom	2
EDPS	32700	Classroom Assessment	1
EDPS	36201	Positive Behavioral Supports	2
EDPS	43010	Secondary Creating and Managing Learning Environments	1
EDCI/ EDPS	20001	Special Pop Sem: Focus on Students with Disabilities and Differentiation OR Special Pop Sem: Focus on Students with Disabilities and Differentiation	1
EDCI/ EDPS	20002	Special Pop Sem: English Lang Learners and Students with Gifts OR Special Pop Sem: English Lang Learners and Students with Gift	1

Methods Courses

EDCI	42500	Teaching Of Secondary Mathematics - Methods I	3
EDCI	42600	Teaching Of Secondary Mathematics - Methods II	3

Student Teaching

Completion of education methods courses and other Milestone requirements for the major area and admittance to teacher education required prior to this course.

EDPS	49800	Supervised Teaching	12
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University Concentrations

Choose one course from the concentrations below that was not already taken as a required course. Students can elect to take additional coursework to complete a full concentration if they choose, but it is not required.

*English Language Learners (Licensure Eligible)**12-13*

EDCI	37001	Teaching and Learning English as a New Language	2-3
EDCI	51900	Teaching English Language Learners	3
EDCI	52600	Language Study for Educators	3

EDCI	55900	Academic Language and Content Area Learning	3
EDCI/ EDPS	20002	Special Pop Sem: English Lang Learners and Students with Gifts OR Special Pop Sem: English Lang Learners and Students with Gifts	1

High Ability (Licensure Eligible)

13-15

All courses must be completed with a B- or better average

EDCI/ EDPS	20001	Special Pop Sem: Focus on Students with Disabilities and Differentiation OR Special Pop Sem: Focus on Students with Disabilities and Differentiation	1
EDCI/ EDPS	20002	Special Pop Sem: English Lang Learners and Students with Gifts OR Special Pop Sem: English Lang Learners and Students with Gifts	1
EDPS	24800	Differentiating Curriculum and Instruction	1
EDPS	49500	Practicum in Gifted, Creative, and Talented Education	3
EDPS	54200	Curriculum and Program Development in Gifted Education	3
EDPS	54500	Social and Affective Development of Gifted Students	3
<i>Select one</i>			
EDPS	24000	Children with Gifts, Creativity, and Talents OR	1
EDPS	54000	Gifted, Creative, and Talented Children	3

Special Education (Non-Licensure)

12-13

EDCI/ EDPS	20001	Special Pop Sem: Focus on Students with Disabilities and Differentiation OR Special Pop Sem: Focus on Students with Disabilities and Differentiation	1
EDCI/ EDPS	20002	Special Pop Sem: English Lang Learners and Students with Gifts OR Special Pop Sem: English Lang Learners and Students with Gifts	1
EDPS	21100	Special Education Law, Policy, and Ethical Guidelines	3
EDPS	26501	The Inclusive Classroom	2
EDPS	36201	Positive Behavioral Supports	2-3
EDPS	41700	Special Education Knowledge and Skills for General Educators	3

Applied Behavioral Analysis (Non-Licensure)

12

EDPS	34100	Introduction to Philosophical Underpinning and Concepts of Behavior	3
EDPS	34200	Applied Behavior Analysis - Assessment and Intervention	3
EDPS	44100	Introduction to Ethics and Practice of Applied Behavior Analysis	3
EDPS	44200	Advanced Intervention in Applied Behavior Analysis	3

Licensure Information

All Purdue University Program and Indiana Department of Education requirements must be met for recommendation for Indiana licensure.

[After all requirements are met, Purdue graduates will be considered eligible to apply to the Indiana Department of Education for licensure under REPA 3 in:](#)

Mathematics (5-12)

Addition in Blended and Online Teaching (5-12)

Optional: Addition in High Ability (P-12) or ELL (P-12) if chosen university concentration requirements are
[Visit the Indiana Department of Education website for more information about what courses can be taught once licensed in this area.](#)

Please reference the 2023-2024 Mathematics Education Guidelines and Requirements and the 2023-2024 Mathematics Education Checklist for more information.