

# MATHEMATICS EDUCATION

Grade Level 5-12  
REPA 3

NOT VALID  
WITHOUT  
OFFICIAL  
TRANSCRIPT  
EVALUATION

## Purdue University Course Catalog 2022-2023

### CONTENT

### CREDIT HOURS

#### Major Courses

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 <sup>1</sup>	3
STAT	31100	Introductory Probability	3
STAT	35000	Introduction to Statistics <sup>1</sup>	3

#### *One of the following:*

MA	30100	An Introduction to Proof Through Real Analysis (3)	3
MA	34100	Foundations of Analysis (3)	

#### *One of the following:*

MA	45000	Algebra (Honors) (3)	3
MA	45300	Elements of Algebra I (3)	

#### *One of the following:*

CS	15900	Programming Applications for Engineers (3)	3-4
CS	17700	Programming with Multimedia Objects (4)	
CS	18000	Problem Solving and Object-Oriented Programming (4)	

#### *One of the following (Calculus I Selective):*

MA	16100	Plane Analytic Geometry and Calculus I (5)	4-5
MA	16500	Analytic Geometry and Calculus I (4)	

#### *One of the following (Calculus II Selective):*

MA	16200	Plane Analytic Geometry and Calculus II (5)	4-5
MA	16600	Analytic Geometry and Calculus II (4)	

#### *One of the following (Calculus III Selective):*

MA	26100	Multivariate Calculus (4)	4-5
MA	27101	Honors Multivariate Calculus (5)	

**Total Content 43-47**

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

### PROFESSIONAL EDUCATION

#### Professional Education Course Requirements

EDCI	20500	Exploring Teaching as a Career <b>*required for TEP admission</b>	2
EDCI	22550	Mathematics Education Seminar	1
EDCI	27000	Introduction to Education Technology and Computing	1

EDCI	28500	Multiculturalism and Education <i>*required for TEP admission</i>	2
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
EDCI	42500	Teaching of Secondary Mathematics – Methods 1	3
EDCI	42600	Teaching of Secondary Mathematics – Methods II	3
EDCI	49800	Supervised Teaching	12
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
EDST	20010	Educational Policies and Laws <i>*required for TEP admission</i>	1
EDCI/ EDPS	20001	Special Pop Sem: Focus on Students with Disabilities and Differentiation (1), OR Special Pop Sem: Focus on Students with Disabilities and Differentiation (1)	1
EDCI/ EDPS	20002	Special Pop Sem: English Lang Learners and Students with Gifts (1), OR Special Pop Sem: English Lang Learners and Students with Gifts (1)	1

### **Learner Pathway Course**

3

Pick **ONE** course from the selective below in a pathway of your choice (required). ABA courses are included if allowed by the plan of study. Students can take two additional courses in the same pathway to complete requirements for an add-on teaching license in ELL or HA or take one additional course in the SPED pathway for a certificate in SPED.

#### ***English Language Learners Licensure Pathway***

EDCI	51900	Teaching English Language Learners (3)
EDCI	52600	Language Study for Educators (3)
EDCI	55900	Academic Language and Content Area Learning (3)

#### ***Special Education Non-Licensure Pathway***

EDPS	21100	Special Education Law, Policy, and Ethical Guidelines (3)
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#### ***High Ability Licensure Pathway***

EDPS	54200	Curriculum and Program Development in Gifted Education (3)
EDPS	54500	Social and Affective Development of Gifted Students (3)

#### ***Applied Behavior Analysis Non-Licensure Pathway***

EDPS	34100	Introduction to Philosophical Underpinnings and Concepts of Applied Behavior Analysis (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)

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**Total Professional Education 44**

### **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 pathway requirements are completed**

Visit the [Indiana Department of Education website](#) for more information about what courses can be taught once licensed in this area.

Please reference the 2022-2023 Mathematics Education Guidelines and Requirements and the 2022-2023 Mathematics Education Checklist for more information.