## MATHEMATICS EDUCATION
### Grade Level 5-12
### REPA 3

**Purdue University Course Catalog 2022-2023**

### CONTENT

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>CREDIT HOURS</th>
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<tr>
<td>MA 35100 Elementary Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MA 36600 Ordinary Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MA 37500 Introduction to Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MA 46000 Geometry</td>
<td>3</td>
</tr>
<tr>
<td>MA 48400 Seminar on Teaching College Algebra and Trigonometry(^1)</td>
<td>3</td>
</tr>
<tr>
<td>STAT 31100 Introductory Probability</td>
<td>3</td>
</tr>
<tr>
<td>STAT 35000 Introduction to Statistics(^1)</td>
<td>3</td>
</tr>
</tbody>
</table>

*One of the following:* 3

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

*One of the following:* 3

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

*One of the following:* 3-4

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

*One of the following (Calculus I Selective):* 4-5

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

*One of the following (Calculus II Selective):* 4-5

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

*One of the following: (Calculus III Selective)* 4-5

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

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

### PROFESSIONAL EDUCATION

**Professional Education Course Requirements**

<table>
<thead>
<tr>
<th>EDCI 20500 Exploring Teaching as a Career</th>
<th>2</th>
</tr>
</thead>
</table>

*required for TEP admission*

<table>
<thead>
<tr>
<th>EDCI 22550 Mathematics Education Seminar</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 27000 Introduction to Education Technology and Computing</td>
<td>1</td>
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</tbody>
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2022-2023

Purdue University Teacher Education Program
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 28500</td>
<td>Multiculturalism and Education *required for TEP admission</td>
<td>2</td>
</tr>
<tr>
<td>EDCI 30900</td>
<td>Reading in Middle and Secondary Schools: Methods and Problems</td>
<td>1</td>
</tr>
<tr>
<td>EDCI 35000</td>
<td>Community Issues and Applications for Educators</td>
<td>1</td>
</tr>
<tr>
<td>EDCI 37001</td>
<td>Teaching and Learning English as a New Language</td>
<td>2</td>
</tr>
<tr>
<td>EDCI 42500</td>
<td>Teaching of Secondary Mathematics - Methods I</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 42600</td>
<td>Teaching of Secondary Mathematics - Methods II</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 49800</td>
<td>Supervised Teaching</td>
<td>12</td>
</tr>
<tr>
<td>EDPS 23500</td>
<td>Learning and Motivation</td>
<td>2</td>
</tr>
<tr>
<td>EDPS 24000</td>
<td>Children with Gifts, Creativity, and Talents</td>
<td>1</td>
</tr>
<tr>
<td>EDPS 24800</td>
<td>Differentiating Curriculum and Instruction</td>
<td>1</td>
</tr>
<tr>
<td>EDPS 26501</td>
<td>The Inclusive Classroom</td>
<td>2</td>
</tr>
<tr>
<td>EDPS 32700</td>
<td>Classroom Assessment</td>
<td>1</td>
</tr>
<tr>
<td>EDPS 36201</td>
<td>Positive Behavioral Supports</td>
<td>2</td>
</tr>
<tr>
<td>EDPS 43010</td>
<td>Secondary Creating and Managing Learning Environments</td>
<td>1</td>
</tr>
<tr>
<td>EDST 20010</td>
<td>Educational Policies and Laws *required for TEP admission</td>
<td>1</td>
</tr>
<tr>
<td>EDCI/EDPS 20001</td>
<td>Special Pop Sem: Focus on Students with Disabilities and Differentiation (1)</td>
<td>1</td>
</tr>
<tr>
<td>EDCI/EDPS 20002</td>
<td>Special Pop Sem: English Lang Learners and Students with Gifts (1)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Learner Pathway Course**

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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDCI 51900</td>
<td>Teaching English Language Learners</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 52600</td>
<td>Language Study for Educators</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 55900</td>
<td>Academic Language and Content Area Learning</td>
<td>3</td>
</tr>
</tbody>
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**Special Education Non-Licensure Pathway**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPS 21100</td>
<td>Special Education Law, Policy, and Ethical Guidelines (3)</td>
<td></td>
</tr>
</tbody>
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**High Ability Licensure Pathway**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPS 54200</td>
<td>Curriculum and Program Development in Gifted Education (3)</td>
<td></td>
</tr>
<tr>
<td>EDPS 54500</td>
<td>Social and Affective Development of Gifted Students (3)</td>
<td></td>
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**Applied Behavior Analysis Non-Licensure Pathway**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>EDPS 34100</td>
<td>Introduction to Philosophical Underpinnings and Concepts of Applied Behavior Analysis (3)</td>
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</tr>
<tr>
<td>EDPS 34200</td>
<td>Applied Behavior Analysis - Assessment and Intervention (3)</td>
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</tr>
<tr>
<td>EDPS 44100</td>
<td>Introduction to Ethics and Practice of Applied Behavior Analysis (3)</td>
<td></td>
</tr>
<tr>
<td>EDPS 44200</td>
<td>Advanced Intervention in Applied Behavior Analysis (3)</td>
<td></td>
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</table>

**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](https://www2.doe.in.gov/) 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](https://www2.doe.in.gov/) 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.