

# B.S. IN MATHEMATICS AND EDUCATION WITH ENDORSEMENT IN ELEMENTARY EDUCATION (MA.EDE.BS)

Code	Title	Credits
<b>Major Requirements/Mathematics (46 credits)</b>		
MA-120	Introduction to Mathematical Reasoning <i>(Satisfies Mathematics (MA) in General Education)</i>	4
MA-125	Calculus with Analytic Geometry I	4
MA-126	Calculus with Analytic Geometry II	4
MA-205	Number Systems	3
MA-220	Probability and Statistics I	3
MA-221	Linear Algebra	3
MA-225	Calculus with Analytic Geometry III	4
MA-314	Number Theory <i>(Satisfies Reasoned Oral Discourse (RD) in General Education)</i>	3
MA-317	Geometry	3
MA-325	History of Mathematics <i>(Satisfies Global Understanding (GU) in General Education)</i>	3
MA-410	Modern Algebra	3
MA-415	Real Analysis	3
Select 6 credits from Mathematics (MA) at the 300 or 400 level or above		6
<b>Math Interdisciplinary Requirements (4 credits)</b>		
MA-237	Programming and Technology in Mathematics <i>(Satisfies Technological Literacy (TL) in General Education)</i>	4
<b>Major Requirements/Education (36 credits)<sup>1</sup></b>		
ED-250	Psychological and Philosophical Foundations of Education	3
ED-320	Teaching Emergent Multilinguals in an Inclusive Classroom	3
EDS-330	Foundations of Special Education: Child & Adolescent Development and Transition to Adulthood	3
EDS-336	Classroom Management	3
EDL-326	Literacy Instruction in P-6 Educational Settings I	3
EDL-327	Methods of Teaching Content Literacy Including ELA and Social Studies	3
ED-360	Methods of Teaching Mathematics in Grades P-6	3
ED-361	Disciplinary Literacy and Methods of Teaching Elementary Science	3
ED-304	Social Studies and Literacy Methods for K-6	3
ED-401	Literacy Assessment to Inform Instruction	3

ED-406	Clinical Practice NEW	6
<b>Free Electives (1 credits)<sup>3</sup></b>		
Select one credit of free elective.		1
<b>General Education Requirements (33 credits)<sup>4</sup></b>		
Complete 33 credits as outlined on the General Education table. <sup>4</sup>		33
<b>Total Credits</b>		<b>120</b>

- <sup>1</sup> Minimum grade of "C" required for Education courses.
- <sup>2</sup> Students must complete the appropriate test requirement(s) with a passing score PRIOR to Student Teaching.
- <sup>3</sup> Please consult with your advisor regarding the required number of free electives that must be completed.
- <sup>4</sup> The General Education curriculum requires the completion of 45 credits. However, students may be able to share credits from within their major or interdisciplinary requirements. Please consult with your advisor to determine which General Education (<https://catalog.monmouth.edu/undergraduate-catalog/academic-programs-support-services-regulations/general-education-requirements/>) courses must be completed.

## Additional Endorsements Available

- MID-MA - Middle School Mathematics and/or STEM
- ESL - English as a Second Language - Elementary
- P-3 Early Childhood Endorsement
- TSD - Teaching Students with Disabilities

## Notes

- 54 credits must be completed at the 200 level or higher.
- Education majors are required to have an overall GPA of 3.00 for State Certification
- By state regulation, all Education majors seeking content area endorsement must complete 30 content credits (12+ credits at the 300+ level).

## Sequence Chart

First Year			
Fall	Credits	Spring	Credits
EN-101 College Composition I	3	EN-102 College Composition II	3
MA-120 Introduction to Mathematical Reasoning (Gen*Ed Mathematics)	4	MA-126 Calculus with Analytic Geometry II	4
MA-125 Calculus with Analytic Geometry I	4	ED-250 Psychological and Philosophical Foundations of Education	3
Gen*Ed Historical Perspectives (HS.SV)	3	Gen*Ed Social Science Survey (SS.SV)	3
Gen*Ed Aesthetics (AT) AR, DA, MU, TH	3	FO-xxx Gen*Ed World Language	3
<b>Semester Credits</b>		<b>17 Semester Credits</b>	
<b>Second Year</b>			
Fall	Credits	Spring	Credits
MA-221 Linear Algebra	3	MA-220 Probability and Statistics I	3
MA-237 Programming and Technology in Mathematics (General Education Technological Literacy (TL))	4	MA-225 Calculus with Analytic Geometry III	4

MA-205 Number Systems	3	EDS-330 Foundations of Special Education: Child & Adolescent Development and Transition to Adulthood	3
ED-320 Teaching Emergent Multilinguals in an Inclusive Classroom (Gen*Ed Reasoned Oral Discourse (RD) and Writing Intensive (WT))	3	Gen*Ed Literature	3
EDL-326 Literacy Instruction in P-6 Educational Settings I	3	BY, CE, GL, PH, SC General Education Natural Science (NS)	3
<b>Semester Credits</b>	<b>16</b>	<b>Semester Credits</b>	<b>16</b>
<b>Third Year</b>			
<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
ED-361 Disciplinary Literacy and Methods of Teaching Elementary Science	3	MA-317 Geometry	3
EDS-336 Classroom Management	3	MA-410 Modern Algebra	3
MA-314 Number Theory	3	MA-300+ Math Elective	3
MA-300+ Math Elective	3	ED-304 Social Studies and Literacy Methods for K-6	3
Gen*Ed Historical Perspectives (HS.SV) or Social Science Survey (SS.SV)	3	Gen*Ed Natural Science (NS) BY, CE, PH, GL, SC	3
<b>Semester Credits</b>	<b>15</b>	<b>Semester Credits</b>	<b>15</b>
<b>Fourth Year</b>			
<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
MA-415 Real Analysis	3	MA-325 History of Mathematics (Gen*ED Global Understanding (GU) and Writing Intensive (WT))	3
EDL-327 Methods of Teaching Content Literacy Including ELA and Social Studies (General Education Writing Intensive (WT))	3	ED-406 Clinical Practice NEW	6
ED-360 Methods of Teaching Mathematics in Grades P-6	3	ED-401 Literacy Assessment to Inform Instruction	3
PR-4xx Gen*Ed Interdisciplinary Perspectives (ISP)	3		
Free Elective	1		
<b>Semester Credits</b>	<b>13</b>	<b>Semester Credits</b>	<b>12</b>
<b>Total Credits 120</b>			