

# B.S. IN MATHEMATICS AND EDUCATION WITH ENDORSEMENT IN SECONDARY EDUCATION IN MATHEMATICS (MA.EDS.BS)

Code	Title	Credits
<b>Major Requirements/Mathematics (43 credits)</b>		
<i>(Satisfies Mathematics in General Education)</i>		
MA-120	Introduction to Mathematical Reasoning	4
MA-125	Calculus with Analytic Geometry I	4
MA-126	Calculus with Analytic Geometry II	4
MA-220	Probability and Statistics I	3
MA-221	Linear Algebra	3
MA-225	Calculus with Analytic Geometry III	4
MA-314	Number Theory	3
<i>(Satisfies Reasoned Oral Discourse (RD) in General Education)</i>		
MA-317	Geometry	3
MA-325	History of Mathematics	3
<i>(Satisfies Global Understanding (GU) in General Education)</i>		
MA-410	Modern Algebra	3
MA-415	Real Analysis	3
Select 6 credits from Mathematics (MA) at the 300 and 400 level or above		
<b>MA Interdisciplinary Requirements (4 credits)</b>		
MA-237	Programming and Technology in Mathematics	4
<i>(Satisfies Technological Literacy (TL) in General Education)</i>		
<b>Major Requirements/Education (24 credits)<sup>1</sup></b>		
ED-250	Psychological and Philosophical Foundations of Education	3
EDS-330	Foundations of Special Education: Child & Adolescent Development and Transition to Adulthood	3
EDS-336	Classroom Management	3
ED-319	Content Literacy and Assessment	3
ED-320	Teaching Emergent Multilinguals in an Inclusive Classroom	3
ED-416 & 416S	Clinical Practice and Clinical Practice Seminar <sup>2</sup>	9
<b>Education Methods Requirements (6 credits)<sup>1</sup></b>		
ED-315	Digital Media and Instructional Technology Skills for Teachers	3
ED-365	Methods of Teaching Mathematics at the Secondary Level	3
<b>Free Electives (10 credits)<sup>3</sup></b>		
Complete 10 credits of free electives <sup>3</sup>		10
<b>General Education Requirements (33 credits)<sup>4</sup></b>		

Complete 30 credits as outlined on the General Education table.<sup>4</sup> 33

**Total Credits** 120

<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 Clinical Practice.

<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 (<http://catalog.monmouth.edu/undergraduate-catalog/academic-programs-support-services-regulations/general-education-requirements/>) courses must be completed.

## Additional Endorsements Available

- TSD - Teacher of Student with Disabilities - Secondary
- ESL - English as a Second Language - Secondary

## 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).

### First Year

Fall	Credits	Spring	Credits
MA-120 Introduction to Mathematical Reasoning (Gen*Ed Mathematics)	4	ED-250 Psychological and Philosophical Foundations of Education	3
MA-125 Calculus with Analytic Geometry I	4	MA-126 Calculus with Analytic Geometry II	4
EN-101 College Composition I	3	EN-102 College Composition II	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

**Semester Credits** 17 **Semester Credits** 16

### Second Year

Fall	Credits	Spring	Credits
ED-320 Teaching Emergent Multilinguals in an Inclusive Classroom (Gen*Ed Reasoned Oral Discourse (RD) and Writing Intensive (WT)	3	MA-225 Calculus with Analytic Geometry III	4
MA-221 Linear Algebra	3	MA-220 Probability and Statistics I	3
MA-237 Programming and Technology in Mathematics (Gen*Ed Technological Literacy (TL)	4	EDS-330 Foundations of Special Education: Child & Adolescent Development and Transition to Adulthood (Gen*Ed Writing Intensive	3
EN-2xx Gen*Ed LLiterature (ILIT)	3	Gen*Ed Natural Science (NS) BY,CE,PH,SC,GL	3
Gen*Ed Natural Science (NS) BY,CE,PH,SC,GL	3	Free Elective	3

**Semester Credits** 16 **Semester Credits** 16

**Third Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
EDS-336 Classroom Management	3	ED-319 Content Literacy and Assessment (Gen*Ed WT)	3
MA-314 Number Theory	3	MA-317 Geometry	3
Gen*Ed Historical Perspectives (HS.SV) or Social Science Survey (SS.SV)	3	MA-410 Modern Algebra	3
Free Elective	3	Free Electives	3
Free Elective	1	Math Elective (300- or 400-level)	3
Math Elective (300-or 400-level)	3		
<b>Semester Credits</b>	<b>16</b>	<b>Semester Credits</b>	<b>15</b>

**Fourth Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
MA-415 Real Analysis (Gen*Ed WT)	3	MA-325 History of Mathematics (Gen Ed GU & WT)	3
Gen*Ed Interdisciplinary Perspectives (ISP)	3	ED-416 Clinical Practice (Gen*Ed EX)	8
ED-315 Digital Media and Instructional Technology Skills for Teachers	3	ED-416S Clinical Practice Seminar	1
ED-365 Methods of Teaching Mathematics at the Secondary Level	3		
<b>Semester Credits</b>	<b>12</b>	<b>Semester Credits</b>	<b>12</b>

**Total Credits 120**