## MATHEMATICS EDUCATION MAJOR

Code	Title	Credits	
Degree Core Requirements <sup>1</sup>			
EDCI 2574	Social Foundations of Education	3	
EDCI 4554	Educating Exceptional Learners	3	
EDCI 4724	Secondary School Teaching Methods I	3	
EDCI 4734	Adolescent Literacy and Reading	3	
EDCI 4744	Secondary School Teaching Methods II	3	
EDEP 2374	Educational Psychology for PK-12 Teachers	3	
EDEP 3474	Principles and Practices in PK-12 Assessment	3	
Subtotal		21	
Major Requirements			
MATH 1004	Discovering Mathematics I	1	
MATH 1044	Discovering Mathematics II	2	
MATH 2114	Introduction to Linear Algebra	3	
MATH 2204	Introduction to Multivariable Calculus	3	
MATH 3034	Introduction to Proofs	3	
MATH 3124	Modern Algebra	3	
MATH 3224	Advanced Calculus	3	
MATH 4044	History of Mathematics	3	
MATH 4334	College Geometry	3	
MATH 4625	Mathematics for Secondary Teachers	3	
MATH 4626	Mathematics for Secondary Teachers	3	
EDCI 4244	Curriculum and Instruction in Middle School Mathematics (4-8)	3	
Computer Programming			
Select one of the	following:	3	
CS 1044	Introduction to Programming in C		
CS 1054	Introduction to Programming in Java		
CS 1064	Introduction to Programming in Python		
CS 1114	Introduction to Software Design		
Secondary Teaching Practicum			
EDCI 3964	Field Study	6	
EDCI 4964	Field Study	9	
Subtotal		51	
Free Electives			
Select one credit of free electives			
Subtotal		1	
Pathways to Gene	eral Education <sup>2</sup>		
Pathways Concept	1 - Discourse		
ENGL 1105	First-Year Writing (1F)	3	
or COMM 1015	Communication Skills		
ENGL 1106	First-Year Writing (1F)	3	
or COMM 1016	Communication Skills		
Select three credits in Pathway 1a (https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G01A)			
Pathways Concept 2 - Critical Thinking in the Humanities			
Select six credits	in Pathway 2 (https://catalog.vt.edu/course- hways=attrs_pathways_G02)	6	

Total Credits		
Subtotal	47	
Select three credits in Pathway 7 (https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G07)		
Pathways Concept 7 - Critical Analysis of Identity and Equity in the United States		
Select three credits in Pathway 6a (https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G06A)		
Select three credits in Pathway 6d (https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G06D)		
Pathways Concept 6 - Critique and Practice in Design and the Arts		
STAT 3005 Statistical Methods (5A)	3	
MATH 1226 Calculus of a Single Variable (5F)	4	
MATH 1225 Calculus of a Single Variable (5F)	4	
Pathways Concept 5 - Quantitative and Computational Thinking		
Select six credits in Pathway 2 (https://catalog.vt.edu/course- search/?attrs_pathways=attrs_pathways_G02)	6	
Pathways Concept 4 - Reasoning in the Natural Sciences		
Select six credits in Pathway 2 (https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G02)		
Pathways Concept 3 - Reasoning in the Social Sciences		

- Unless otherwise indicated, all courses must be taken on an A-F basis; courses satisfying degree core requirements may not be double counted to satisfy other areas of a degree.
- Unless otherwise indicated, all courses taken to satisfy Pathways General Education must be taken on an A-F basis.

## **Satisfactory Progress Toward Degree**

University Policy 91<sup>1</sup> requires a student to make satisfactory progress towards a degree. Additionally, licensure programs require that by the time a student has completed 72 credits, they must have passed all licensure examinations, carry an in-major GPA of 3.0, and be accepted into the educator preparation program.

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## **Graduation Requirements**

<u>Credits and GPA</u>- Completion of a minimum of 120 credits with a minimum overall GPA of 2.5; and in-major GPA of 3.0. (In major GPA includes all EDCI and EDEP courses)

<u>Prerequisites</u> - Some courses listed on this checksheet may have pre-/co-requisites; please consult the University Course Catalog or check with your advisor.

<u>Additional Requirements</u> - Students must submit passing scores on required state licensure examinations.

<sup>&</sup>lt;sup>1</sup> https://policies.vt.edu/91-eligibility-for-continued-enrollment.pdf

## **Language Study Requirement**

Students who do not complete two years of a single foreign or classical language or American Sign Language in high school, may do so by taking six credits of college-level foreign or classical language or American Sign Language. The six credits used to meet this requirement may not be used to satisfy the minimum number of credits required for graduation.