COLLEGE OF SCIENCE
MATHEMATICS
VIRGINIA TECH

MATH EDUCATION OPTION
B.S. MATHEMATICS

SAMPLE PROGRAM OF STUDY – MATHEMATICS: MATH EDUCATION OPTION

There is considerable flexibility in designing a program of study. The example given below is not likely to fit every situation and is provided for information as you develop your own plan with your academic advisor. All course requirements for the B.S. Mathematics, Mathematics Education Option are included in this sample plan. See the 2024-2025 Academic Catalog for details.

Fall Semester Year 1		Credits
MATH 1225	Calculus of a Single Variable (Pathway 5f)	4
MATH 1004	Discovering Mathematics I (fall only)*	1
MATH 1454	Intro Math Prog (fall only; coreq: MATH 1225)[1]	3
ENGL 1105	First-Year Writing (Pathway 1f)	3
	Pathway 2	3
		14

Spring Semester Year 1		Credits
MATH 1226	Calculus of a Single Variable (Pathway 5f)	4
MATH 1044	Discovering Mathematics II (spring only)*	2
ENGL 1106	First-Year Writing (Pathway 1f)	3
	Pathway 3	3
	Pathway 7[2]	3
		15

Fall Semester Year 2		Credits
MATH 2114	Intro to Linear Algebra	3
MATH 2204	Intro to Multivariable Calculus	3
MATH 2644	Mathematics Tutoring[3]	1
	Pathway 3	3
	Pathway 6a	3
	Pathway 4 (BIOL, CHEM, GEOS, ISC, NEUR PHYS, or PSYC)	3
		16

Spring Semester Year 2		Credits
MATH 2214	Intro to Differential Equations (Pathway 5a)	3
MATH 3034	Intro to Proofs (prereq: C in MATH 2114)	3
	Pathway 2	3
	Pathway 6d	3
	Pathway 4 (BIOL, CHEM, GEOS, ISC, NEUR PHYS, or PSYC)	3
		15

Fall Semester Year 3		Credits
MATH 3124	Modern Algebra	3
MATH 4334	College Geometry	3
MATH 3/4XXX	3000 or 4000-Level Math Elective[4]	3
	Pathway 1a	3
	Free Elective	3
		15

Spring Semester Year 3		Credits
MATH 3144	Linear Algebra I	3
EDCI 2004	Exploring Teaching Profession	3
STAT 3005	Statistical Methods or STAT 3604 (Pathway 5a)	3
	Free Elective	3
	Free Elective	3
		15

Fall Semester Year 4		Credits
MATH 3224	Advanced Calculus	3
MATH 4044	History of Math (fall only)	3
MATH 4625	Math for Secondary Teachers (fall only)	3
EDCI 5554	Educating Exceptional Learners[5]	3
	Free Elective	3
	Pass Praxis II	15

Spring Semester Year 4		Credits
MATH 4626	Math for Secondary Teachers (spring only)	3
EDEP 5154	Psych Foundations for Teachers[5]	3
EDCI 5604	Assess/Diagnosis for Math Class (spring only)[5]	3
	Free Elective	3
	Free Elective	3
		15

See next page for 5th year courses. 4th year course plans should take the 5th year into account.

[1] MATH 1225 is a corequisite for MATH 1454. Discuss choice of programming course with academic advisor.
Other options include: CS 1044, 1054, 1064, 1114; AOE 2074; BMES 2074; ECE 2514; ESM 2074; ME 2004

[2] The course selected in Pathway 7 may double-count with one other Pathway Concept if the selected course is also in another Pathway Concept.

[3] MATH 2644 can be repeated for credit up to three times (for three total credits).

[4] Any 3000-level or 4000-level MATH course not used to meet other course-specific degree requirements. Math Undergraduate Policy & Curriculum Committee Approval required to use any of {4974, 4984, 4994}.

[5] Choose two of {EDEP 5154, EDCI 5104, EDCI 5554, EDCI 5264}. Senior standing required to enroll in 5000-level EDCI/EDEP courses.

* MATH 1004 and MATH 1044 are strongly recommended free electives for first-year math majors.

Minimum Graduation Requirements:
Credit Hours: 120
Overall GPA: 2.0
In-Major GPA: 2.0

5-YEAR MASTER'S STUDENTS

IMPORTANT: The courses listed below are not official M.A.Ed. requirements; they are approximations based on current requirements to help with possible future planning. The requirements for the M.A.Ed. degree may change by the time students who begin their undergraduate studies in 2024 reaches the Master's application and degree requirements.

Summer after Year 4 (unofficial)			**Credits**
EDCI	5104	Schooling in American Society	3
EDCI	5264	Comp Processes and Content Reading	3
			6

Fall Semester Year 5 (unofficial)			**Credits**
EDCI	5284	Advanced Curriculum and Instruction	3
EDCI	5724	Teaching in Secondary Schools I: Math	3
EDCI	5964	Field Studies in Education	3
EDCI	5914	Diversity and Multicultural Education	3
			12

Spring Semester Year 5 (unofficial)			**Credits**
EDCI	5744	Teaching in Secondary Schools II: Math	3
EDCI	5754	Internship in Education (student teaching)	9
EDCI	5784	Professional Dispositions in Math Education	3
			15