

SAMPLE PROGRAM OF STUDY – MATHEMATICS: TRADITIONAL 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 Traditional 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
	Pathway 3	3
		17

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 2	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
	Pathway 3	3
	Pathway 4 (BIOL, CHEM, GEOS, ISC, NEUR PHYS, or PSYC)	3
	Pathway 6a	3
		15

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 6d	3
	Pathway 4 (BIOL, CHEM, GEOS, ISC, NEUR PHYS, or PSYC)	3
	Free Elective	3
<i>Submit Interdisciplinary Application of Mathematics Course Plan (IAMCP)³</i>		15

Fall Semester Year 3		Credits
MATH 3124	Modern Algebra	3
MATH 3214	Calculus of Several Variables	3
	IAMCP Course ³	3
	Pathway 1a	3
	Free Elective	3
		15

Spring Semester Year 3		Credits
MATH 3144	Linear Algebra I	3
MATH 3224	Advanced Calculus	3
	IAMCP Course ³	3
	Free Elective	3
	Free Elective	3
		15

Fall Semester Year 4		Credits
MATH 4XXX	4000-Level Math Sequence/Cluster ⁴	3
MATH 4XXX	4000-Level Math Elective ⁵	3
	IAMCP Course ³	3
	Free Elective	3
	Free Elective	3
		15

Spring Semester Year 4		Credits
MATH 4XXX	4000-Level Math Sequence/Cluster ⁴	3
MATH 4XXX	4000-Level Math Elective ⁵	3
	IAMCP Course ³	3
	Free Elective	3
	Free Elective	1
		13

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 See [Undergraduate Handbook for Mathematics Majors](#) for details.

⁴ Select a two-course sequence/cluster from the following. Note that (F) = offered in fall only; (S) = offered in spring only

- Any two of: 4124(F), 4134(S), 4144(S), 4175, 4176, 5114(S)
- Any two of: 4445, 4446, 4414
- 4225 together with one of: 4226, 4234
- 4245(F) together with one of: 4254, 4564, 4454(S), 4425(F)
- 4425(F) and 4426(S)
- 5454(F) and 5464(S)

⁵ At most one of {4044, 4334} is allowed. At most one of {4425, 4564} is allowed among all four MATH 4XXX. The following cannot be used {4574, 4625, 4626, 4644, 4654, and 4664}. Undergraduate Policy & Curriculum Committee approval required to use any of {4974, 4984, 4994}.

* 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