## 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 2025-2026 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] | 1 |
| MATH 1454 | Intro Math Prog (fall only; coreq: MATH 1225)[2] | 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)[1] | 2 |
| ENGL 1106 | First-Year Writing (Pathway 1f) | 3 |
| | Pathway 2 | 3 |
| | Pathway 7 [3] | 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 |
| | | **15** |

*Submit Interdisciplinary Application of Mathematics Course Plan (IAMCP)[4]*

**Fall Semester Year 3**

| | | Credits |
|---|---|---|
| MATH 3124 | Modern Algebra | 3 |
| MATH 3214 | Calculus of Several Variables | 3 |
| | IAMCP Course [4] | 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 [4] | 3 |
| | Free Elective | 3 |
| | Free Elective | 3 |
| | | **15** |

**Fall Semester Year 4**

| | | Credits |
|---|---|---|
| MATH 4XXX | 4000-Level Math Sequence/Cluster [5] | 3 |
| MATH 4XXX | 4000-Level Math Elective [6] | 3 |
| | IAMCP Course [4] | 3 |
| | Free Elective | 3 |
| | Free Elective | 3 |
| | | **15** |

**Spring Semester Year 4**

| | | Credits |
|---|---|---|
| MATH 4XXX | 4000-Level Math Sequence/Cluster [5] | 3 |
| MATH 4XXX | 4000-Level Math Elective [6] | 3 |
| | IAMCP Course [4] | 3 |
| | Free Elective | 3 |
| | Free Elective | 1 |
| | | **13** |

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

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

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

[4] See Undergraduate Handbook for Mathematics Majors for details.

[5] 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), 5454(F), 5464(S)
- 4425(F) and 4426(S)
- Any two of: 4445, 4446(S), 4414 (4414 taught by math faculty in fall)
- 4225(F) and one of: 4226(S), 4234(S)
- Any two of: 4245(F), 4254(S), 4425(F), 4454(S)

[6] 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}.

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