

Mathematics, B.S.
College of Science and Mathematics
8 Semester Plan

Discrete Mathematics and Operations Research Concentration

Year 1 - Fall (14 credits)	Credits	Year 1 - Spring (17 credits)	Credits
ENGL 1101- Composition I [Core A1]	3	ENGL 1102- Composition II [Core A1]	3
MATH 1113- Pre-Calculus or Higher [Core A2]	3	MATH 1190- Calculus or Higher [Core D1] †	4
ECON 1000- Contemporary Economic Issues [Core B1]	2	General Education Core B2	3
POLS 1101- American Government [Core E1]	3	General Education Core E2	3
General Education Core E3	3	CSE 1321- Programming & Problem Solving I	3
		CSE 1321L- Programming & Problem Solving I Lab	1
TOTAL	14	TOTAL	17
Year 2 - Fall (17 credits)	Credits	Year 2 - Spring (17 credits)	Credits
General Education Core C2	3	General Education Core D2 [STEM]	4
General Education Core D2 [STEM]	4	General Education Core E4	3
General Education Core C1	3	MATH 2203- Calculus III †	4
MATH 2202- Calculus II †	4	MATH 2390- Intro to Logic, Set Theory, & Proofs †	3
SCM 2000- Culture & Success in Science & Math	3	MATH 2306- Ordinary Differential Equations	3
TOTAL	17	TOTAL	17
Year 3 - Fall (16 credits)	Credits	Year 3 - Spring (15 credits)	Credits
MATH 3332- Probability Theory	3	MATH 3322- Graph Theory	3
MATH 3204- Calculus IV	3	MATH 3324- Enumerative Combinatorics	3
MATH 3260- Linear Algebra I	3	MATH 3272- Introduction to Linear Programming Δ	3
Free Elective (1 of 5)	3	MATH 3261- Numerical Methods I or MATH 3262- Mathematical Modeling	3
Free Elective (2 of 5)	4	Free Elective (3 of 5)	3
TOTAL:	16	TOTAL:	15
Year 4 - Fall (15 credits)	Credits	Year 4 - Spring (9 credits)	Credits
MATH 4361- Modern Algebra I	3	MATH 4382- Real Analysis II or MATH 4362- Modern Algebra II Δ	3
MATH 4381- Real Analysis I	3	MATH 4260- Linear Algebra II Δ	3
Upper Division MATH or STAT Elective (1 of 1)	3	Free Elective (5 of 5)	3
ISYE 4200- Engineering Optimization: Stochastic Decision Models Δ	3		
Free Elective (4 of 5)	3		
TOTAL:	15	TOTAL:	9

Program Total: 120 Credit Hours

***Recommended General Education Course** †**Milestone** Δ **Concentration Course**

This academic map is a suggested four-year schedule of courses based on degree requirements in the undergraduate catalog. This sample schedule serves as a general guideline to help build a full schedule each term. Missing milestones could delay your program. Also see the current undergraduate catalog for a complete list of requirements, electives, and pre-requisites. This map is not a substitute for academic advisement. Note: Requirements are continually under revision, and there is no guarantee they will not be changed or revoked; contact the department and/or program area for current information.

Mathematics, B.S.
College of Science and Mathematics
8 Semester Plan

Computational and Applied Mathematics Concentration

Year 1 - Fall (14 credits)	Credits	Year 1 - Spring (17 credits)	Credits
ENGL 1101- Composition I [Core A1]	3	ENGL 1102- Composition II [Core A1]	3
MATH 1113- Pre-Calculus or Higher [Core A2]	3	MATH 1190- Calculus or Higher [Core D1] †	4
ECON 1000- Contemporary Economic Issues [Core B1]	2	General Education Core B2	3
POLS 1101- American Government [Core E1]	3	General Education Core E2	3
General Education Core E3	3	CSE 1321- Programming & Problem Solving I	3
		CSE 1321L- Programming & Problem Solving I Lab	1
TOTAL	14	TOTAL	17
Year 2 - Fall (17 credits)	Credits	Year 2 - Spring (17 credits)	Credits
General Education Core C2	3	General Education Core D2 [STEM]	4
General Education Core D2 [STEM]	4	General Education Core E4	3
General Education Core C1	3	MATH 2203- Calculus III †	4
MATH 2202- Calculus II †	4	MATH 2390- Intro to Logic, Set Theory, & Proofs †	3
SCM 2000- Culture & Success in Science & Math	3	MATH 2306- Ordinary Differential Equations	3
TOTAL	17	TOTAL	17
Year 3 - Fall (16 credits)	Credits	Year 3 - Spring (15 credits)	Credits
MATH 3332- Probability Theory	3	MATH 3322- Graph Theory <i>or</i> MATH 3324- Enumerative Combinatorics	3
MATH 3204- Calculus IV	3	MATH 3261- Numerical Methods I	3
MATH 3260- Linear Algebra I	3	MATH 3262- Mathematical Modeling Δ	3
Free Elective (1 of 5)	3	Upper Division MATH or STAT Elective (1 of 1)	3
Free Elective (2 of 5)	4	Free Elective (3 of 5)	3
TOTAL:	16	TOTAL:	15
Year 4 - Fall (12 credits)	Credits	Year 4 - Spring (12 credits)	Credits
MATH 4361- Modern Algebra I	3	MATH 4382- Real Analysis II <i>or</i> MATH 4362- Modern Algebra II Δ	3
MATH 4381- Real Analysis I	3	MATH 4391- Complex Analysis Δ	3
MATH 4310- Partial Differential Equations Δ	3	MATH 4260- Linear Algebra II Δ	3
Free Elective (4 of 5)	3	Free Elective (5 of 5)	3
TOTAL:	12	TOTAL:	12

Program Total: 120 Credit Hours

***Recommended General Education Course** †**Milestone** Δ **Concentration Course**

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Mathematics, B.S.
College of Science and Mathematics
8 Semester Plan
Statistics Concentration

Year 1 - Fall (14 credits)	Credits	Year 1 - Spring (17 credits)	Credits
ENGL 1101- Composition I [Core A1]	3	ENGL 1102- Composition II [Core A1]	3
MATH 1113- Pre-Calculus or Higher [Core A2]	3	MATH 1190- Calculus or Higher [Core D1] †	4
ECON 1000- Contemporary Economic Issues [Core B1]	2	General Education Core B2	3
POLS 1101- American Government [Core E1]	3	General Education Core E2	3
General Education Core E3	3	CSE 1321- Programming & Problem Solving I	3
		CSE 1321L- Programming & Problem Solving I Lab	1
TOTAL	14	TOTAL	17
Year 2 - Fall (17 credits)	Credits	Year 2 - Spring (17 credits)	Credits
General Education Core C2	3	General Education Core D2 [STEM]	4
General Education Core D2 [STEM]	4	General Education Core E4	3
General Education Core C1	3	MATH 2203- Calculus III †	4
MATH 2202- Calculus II †	4	MATH 2390- Intro to Logic, Set Theory, & Proofs †	3
SCM 2000- Culture & Success in Science & Math	3	MATH 2306- Ordinary Differential Equations	3
TOTAL	17	TOTAL	17
Year 3 - Fall (16 credits)	Credits	Year 3 - Spring (15 credits)	Credits
MATH 3332- Probability Theory	3	MATH 3322- Graph Theory <i>or</i> MATH 3324- Enumerative Combinatorics	3
MATH 3204- Calculus IV	3	MATH 3261- Numerical Methods I <i>or</i> MATH 3262- Mathematical Modeling	3
MATH 3260- Linear Algebra I	3	STAT 3010- Computer Applications of Statistics Δ	3
Free Elective (1 of 5)	3	Upper Division MATH or STAT Elective (1 of 1)	3
Free Elective (2 of 5)	4	Free Elective (3 of 5)	3
TOTAL:	16	TOTAL:	15
Year 4 - Fall (12 credits)	Credits	Year 4 - Spring (12 credits)	Credits
MATH 4361- Modern Algebra I	3	Applied Statistics & Analytics Minor Course Δ	3
MATH 4381- Real Analysis I	3	Applied Statistics & Analytics Minor Course Δ	3
Applied Statistics & Analytics Minor Course Δ	3	Applied Statistics & Analytics Minor Course Δ	3
Free Elective (4 of 5)	3	Free Elective (5 of 5)	3
TOTAL:	12	TOTAL:	12

Program Total: 120 Credit Hours

***Recommended General Education Course** †**Milestone** Δ **Concentration Course**

This academic map is a suggested four-year schedule of courses based on degree requirements in the undergraduate catalog. This sample schedule serves as a general guideline to help build a full schedule each term. Missing milestones could delay your program. Also see the current undergraduate catalog for a complete list of requirements, electives, and pre-requisites. This map is not a substitute for academic advisement. Note: Requirements are continually under revision, and there is no guarantee they will not be changed or revoked; contact the department and/or program area for current information.

Mathematics, B.S.
College of Science and Mathematics
8 Semester Plan
Pure Mathematics Concentration

Year 1 - Fall (14 credits)	Credits	Year 1 - Spring (17 credits)	Credits
ENGL 1101- Composition I [Core A1]	3	ENGL 1102- Composition II [Core A1]	3
MATH 1113- Pre-Calculus or Higher [Core A2]	3	MATH 1190- Calculus or Higher [Core D1] †	4
ECON 1000- Contemporary Economic Issues [Core B1]	2	General Education Core B2	3
POLS 11101- American Government [Core E1]	3	General Education Core E2	3
General Education Core E3	3	CSE 1321- Programming & Problem Solving I	3
		CSE 1321L- Programming & Problem Solving I Lab	1
TOTAL	14	TOTAL	17
Year 2 - Fall (17 credits)	Credits	Year 2 - Spring (17 credits)	Credits
General Education Core C2	3	General Education Core D2 [STEM]	4
General Education Core D2 [STEM]	4	General Education Core E4	3
General Education Core C1	3	MATH 2203- Calculus III †	4
MATH 2202- Calculus II †	4	MATH 2390- Intro to Logic, Set Theory, & Proofs †	3
SCM 2000- Culture & Success in Science & Math	3	MATH 2306- Ordinary Differential Equations	3
TOTAL	17	TOTAL	17
Year 3 - Fall (16 credits)	Credits	Year 3 - Spring (15 credits)	Credits
MATH 3332- Probability Theory	3	MATH 3322- Graph Theory <i>or</i> MATH 3324- Enumerative Combinatorics	3
MATH 3204- Calculus IV	3	MATH 3261- Numerical Methods I <i>or</i> MATH 3262- Mathematical Modeling	3
MATH 3260- Linear Algebra I	3	Upper Division MATH <i>or</i> STAT Elective (1 of 1)	3
Free Elective (1 of 5)	3	Free Elective (3 of 5)	3
Free Elective (2 of 5)	4	Free Elective (4 of 5)	3
TOTAL:	16	TOTAL:	15
Year 4 - Fall (15 credits)	Credits	Year 4 - Spring (9 credits)	Credits
MATH 4361- Modern Algebra I	3	MATH 4382- Real Analysis II Δ	3
MATH 4381- Real Analysis I	3	MATH 4362- Modern Algebra II Δ	3
MATH 4391- Complex Analysis Δ	3	MATH 3496- Elementary Number Theory <i>or</i> MATH 4596- Topology Δ	3
MATH 4260- Linear Algebra II Δ	3		
Free Elective (5 of 5)	3		
TOTAL:	15	TOTAL:	9

Program Total: 120 Credit Hours

***Recommended General Education Course** †**Milestone** Δ **Concentration Course**

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