



ACADEMIC MAP TO B.S. IN MATHEMATICS - CONCENTRATION IN COMPUTER SCIENCE

2025-2026



NORTHWESTERN STATE
UNIVERSITY OF LOUISIANA

www.nsula.edu/mathematics

START HERE

| YEAR 1 | SEMESTER 1 | | Milestones | Grade | Credits | Minimum Grade |
|--------|--|---|------------|-------|---------|---------------|
| | MATH 1010 – Introduction to Mathematics | ∞ | | | 1 | |
| | MATH 2100 – Analytical Geometry and Calculus I | ∞ | | | 5 | |
| | CSC 1060 – Program Design I | ∞ | | | 3 | |
| | ENGL 1010 – Composition and Rhetoric I | | | | 3 | |
| | FA 1040 – Exploring the Arts | | | | 3 | |
| | UNIV 1000 – The University Experience | | | | 1 | |

Semester Credits _____

| SEMESTER 2 | | Milestones | Grade | Credits | Minimum Grade |
|---|---|------------|-------|---------|---------------|
| MATH 2110 – Analytical Geometry and Calculus II | ∞ | | | 5 | |
| CSC 2060 – Program Design II | ∞ | | | 3 | |
| ENGL 1020 – Composition and Rhetoric II | | | | 3 | |
| PHYS 2510 – General Analytical Physics I | | | | 3 | |
| PHYS 2511 – General Analytical Physics I Laboratory | | | | 1 | |

Semester Credits _____

Total Credits _____

| YEAR 2 | SEMESTER 1 | | Milestones | Grade | Credits | Minimum Grade |
|--------|--|---|------------|-------|---------|---------------|
| | MATH 2080 – Fundamentals of Proof | ∞ | | | 3 | |
| | MATH 3130 – Analytical Geometry and Calculus III | ∞ | | | 3 | |
| | CSC 2100 – Data Structures and Algorithms | | | | 3 | |
| | CSC 4001 – Programming Prep Lab | | | | 1 | |
| | PHYS 2520 – General Analytical Physics II | ∞ | | | 3 | |

Semester Credits _____

Total Credits _____

| SEMESTER 2 | | Milestones | Grade | Credits | Minimum Grade |
|--|---|------------|-------|---------|---------------|
| MATH 3090 – Linear Algebra I | ∞ | | | 4 | |
| CSC 2020 – System Programming | | | | 1 | |
| CIS 3970 – Secured Programming Principles | | | | 3 | |
| CHEM 1030 – General Chemistry I | | | | 3 | |
| CHEM 1031 – General Chemistry I Laboratory | | | | 1 | |
| COMM 1010 – Oral Communication | | | | 3 | |

Semester Credits _____

Total Credits _____

| YEAR 3 | SEMESTER 1 | | Milestones | Grade | Credits | Minimum Grade |
|--------|-------------------------------------|---|------------|-------|---------|---------------|
| | MATH 3100 – Modern Algebra I | ∞ | | | 3 | |
| | MATH 3030 – Math Simulation | ∞ | | | 3 | |
| | MATH 3150 – Theory of Probability | ∞ | | | 3 | |
| | CSC 4001 – Programming Prep Lab | | | | 1 | |
| | BIOL 1010 – Biological Principles I | | | | 3 | |

Semester Credits _____

Total Credits _____

| SEMESTER 2 | | Milestones | Grade | Credits | Minimum Grade |
|---|---|------------|-------|---------|---------------|
| MATH 4940 – Introduction to Mathematical Research | ∞ | | | 2 | |
| CSC 3030 – Computer Theory | | | | 3 | |
| CSC 3120 – Computer Graphics | | | | 3 | |
| EET 1330 – Digital Electronics I | | | | 3 | |
| EET 1331 – Digital Electronics I Laboratory | | | | 1 | |
| ENGL 2110 – Introduction to Literature | | | | 3 | |

Semester Credits _____

Total Credits _____

| YEAR 4 | SEMESTER 1 | | Milestones | Grade | Credits | Minimum Grade |
|--------|--|---|------------|-------|---------|---------------|
| | MATH 4950 – Mathematics – A Capstone Course | ∞ | | | 4 | |
| | MATH 4060 – Number Theory | ∞ | | | 3 | |
| | CSC 4010 – Artificial Intelligence | | | | 3 | |
| | CSC 3040, 4900; CIS 2980; EET 3310; or PHYS 3510 | | | | 3 | |
| | HIST 1010, 1020, 2010, or 2020 | | | | 3 | |

Semester Credits _____

Total Credits _____

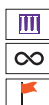
| SEMESTER 2 | | Milestones | Grade | Credits | Minimum Grade |
|---|---|------------|-------|---------|---------------|
| MATH 3910 – Cryptology | ∞ | | | 3 | |
| MATH 4100 – Discrete Math | ∞ | | | 3 | |
| CSC 4040 – Advanced Simulations | | | | 3 | |
| EPSY 2020; PSYC 1010, 2050; or SOC 1010 | | | | 3 | |
| ANTH 1510, 2020; ECON 2000; GEOG 1010, 1020; or PSCI 2010 | | | | 3 | |

Semester Credits _____

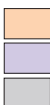
Total Credits **120**

Must maintain a 2.0 GPA within Major and Concentration to graduate.

YOU'VE FINISHED!



University Core Requirement
Mathematics Major Requirement
MILESTONE



Concentration Requirement
Mathematics Major Elective
Academic Elective



GRADUATION REQUIREMENTS

Major Requirements = 45 | University Core/Support = 75 | Total Credits = 120

Courses taken outside of a student's degree program are not eligible for Title IV federal financial aid (grants and loans). However, elective courses are eligible for Title IV aid if they are required and included in the student's program of study. Once a student has completed all required elective credits, any additional elective courses taken beyond the program's requirements will not be eligible for Title IV funding.