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	
PHYS 2521 – General Analytical Physics II Laboratory ∞			1	

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	
BIOL 1011 – Biological Principles Laboratory I			1	

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