



# ACADEMIC MAP TO B.S. IN MATHEMATICS HEALTHCARE INFORMATICS CONCENTRATION

2025-2026



NORTHWESTERN STATE  
UNIVERSITY OF LOUISIANA

[www.nsula.edu/mathematics](http://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	
	ENGL 1010 – Composition and Rhetoric I				3	
	CIS 1015 – Introduction to Computer Information Systems				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	
ENGL 1020 – Composition and Rhetoric II				3	
BIOL 1010 – Biological Principles I				3	
BIOL 1011 – Biological Principles Laboratory I				1	
CIS 1030 – Introduction to Software Development				3	

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 1060 – Program Design I	∞			3	
	CIS 2980 – Database Systems				3	
	ENGL 2110 – Introduction to Literature				3	

Semester Credits \_\_\_\_\_

Total Credits \_\_\_\_\_

SEMESTER 2		Milestones	Grade	Credits	Minimum Grade
MATH 3090 – Linear Algebra I	∞			4	
MATH 3160 – Ordinary Differential Equations				3	
CSC 2060 – Program Design II	∞			3	
CIS 4000 – Advanced Database Systems				3	
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 3150 – Theory of Probability				3	
	CIS 3300 – Object Oriented Programming				3	
	CHEM 1030 – General Chemistry I				3	
	CHEM 1031 – General Chemistry I Laboratory				1	
ANTH 1510, 2020; ECON 2000; GEOG 1010, 1020; or PSCI 2010					3	

Semester Credits \_\_\_\_\_

Total Credits \_\_\_\_\_

SEMESTER 2		Milestones	Grade	Credits	Minimum Grade
MATH 4940 – Introduction to Mathematical Research	∞			2	
MATH (3000-4000)	∞			3	
CIS 2100 – Software Development				3	
PHYS 2510 – General Analytical Physics I				3	
PHYS 2511 – General Analytical Physics I Laboratory				1	
Academic Elective				1	

Semester Credits \_\_\_\_\_

Total Credits \_\_\_\_\_

YEAR 4	SEMESTER 1		Milestones	Grade	Credits	Minimum Grade
	MATH 4950 – Mathematics – A Capstone Course	∞			4	
	STAT 4270 – Mathematical Statistics I				3	
	MATH 4900 – Field Experience in Mathematics				3	
	CIS 3900 – Systems Analysis and Development				3	
	CIS 4020 – Data Structures				3	

Semester Credits \_\_\_\_\_

Total Credits \_\_\_\_\_

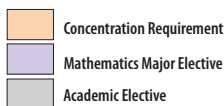
SEMESTER 2		Milestones	Grade	Credits	Minimum Grade
MATH (3000-4000)	∞			3	
Science Elective	∞			3	
Science Elective Lab	∞			1	
HIST 1010, 1020, 2010, or 2020				3	
EPSY 2020; PSYC 1010, 2050; or SOC 1010				3	

Semester Credits \_\_\_\_\_

Total Credits **120**

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

YOU'VE FINISHED!



## GRADUATION REQUIREMENTS

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