

# Lake Superior State University—Articulation Agreement

## Northwestern Michigan College

Transfer Major: Bachelor of Science-Mathematics

Debra Pharo, Chair (231)995-1261  
Science and Maths Department  
Northwestern Michigan College


Brian Snyder, Chair, (906) 635-2658  
School of Mathematics and Computer Science  
Lake Superior State University


Valid: 2019-2023

Northwestern Michigan College Courses		LSSU Equivalency		Additional LSSU Courses	
<b>Michigan Transfer Agreement (MTA)</b>		<b>General Education Requirements Met</b>			
ENG111	English Composition 4	ENGL110	First-Year Composition I 3		
ENG112	English Composition 4	ENGL111	First-Year Composition II 3		
MTH141	Calculus I 5	MATH151	Calculus I 4+1		
	Social & Behavior Science 3		Social & Behavior Science 3		
	Social & Behavior Science 3		Social & Behavior Science 3		
	Humanities 3		Humanities 3		
	Humanities 3		Humanities 3		
PHYS221	Natural Science w/Lab 4+1	PHYS231	Natural Science w/Lab 4+1		
	Natural Science 4		Natural Science 4		
<b>DEPARTMENT REQUIREMENTS</b>		<b>DEPARTMENT REQUIREMENTS</b>		<b>DEPARTMENT REQUIREMENTS</b>	
MTH 141	Calculus I ^ MTA	MATH 151	Calculus I 4+1	CSCI 105	Intro to Computer Programming 3
MTH 142	Calculus II 5	MATH 152	Calculus II 4+1	CSCI 121	Principles of Programming 4
MTH 241	Calculus III 5	MATH 251	Calculus III 4+1	MATH 215	Fundamental Concepts of Mathematics 3
MTH 251	Differential Equations 4	MATH 310	Differential Equations 3+1	MATH 216	Discrete Mathematics and Problem Solving 3
PHY 221	P & P of Physics I ^ MTA			MATH 305	Linear Algebra 3
PHY 221L	P & P of Physics I Lab ^			MATH 308	Probability and Mathematical Statistics 3
PHY 221R	P & P of Physics Recitation ^	PHYS231	Applied Physics for Scientists & Engineers 1	MATH 309	Applied Statistics 4
			(LSSU agrees to waive CSCI 103)	MATH 341	Abstract Algebra I 3
				MATH 351	Graph Theory 3
				MATH 401	Mathematical Modeling 3
				MATH 411	Advanced Topics in Calculus 3
				MATH 490	Individualized Research Topics in Mathematics 3
					One additional math course 3
					LSSU Minor or Electives 21
Electives	14				
<b>TOTAL NMC CREDITS</b>	<b>62</b>			<b>TOTAL ADDITIONAL LSSU CREDITS</b>	<b>62</b>
				<b>TOTAL CREDITS</b>	<b>124</b>

APPROVED BY:

 5/12/19  
Dr. Lynn Gillette Date  
Provost & Vice President for Academic Affairs  
Lake Superior State University

 5-1-19  
Dr. Marguerite Cotto Date  
Vice President for Lifelong and Professional Learning  
Northwestern Michigan College

 3/22/2019  
Dr. Stephen Siciliano Date  
Vice President for Educational Services  
Northwestern Michigan College

Students must have MTA certification from Northwestern Michigan College for agreement to be valid. Students should work with their community college transfer counselor to verify MTA requirements. ^Courses included in MTA.