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 Valid: 2019-2023 Brian Snyder, Chair, (906) 635-2658 School of Mathematics and Computer Science Lake Superior State University Northwestern Michigan College Additional LSSU Courses LSSU Equivalency Courses Michigan Transfer Agreement (MTA) General Education Requirements Met **ENG111 English Composition** ENGL110 First-Year Composition (3 ENG112 **English Composition** 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 Social & Behavior Science 3 3 Humanities 3 Humanities 3 Humanities Humanities 3 3 PHYS221 Natural Science w/Lab PHYS231 Natural Science w/Lab 4+ Natural Science Natural Science DEPARTMENT REQUIREMENTS DEPARTMENT REQUIREMENTS DEPARTMENT REQUIREMENTS 3 CSCI 105 Intro to Computer Programming 4+1 CSCI 121 MTH 141 Calculus I ^ Principles of Programming MTA MATH 151 Calculus I Fundamental Concepts of MTH 142 Calculus II 5 MATH 152 Calculus II 4+1 MATH 215 3 Mathematics Discrete Mathematics and MATH 251 Calculus III 3 MTH 241 Calculus III 4+1 MATH 216 Problem Solving 4 3+1 MATH 305 Linear Algebra 3 MTH 251 Differential Equations MATH 310 Differential Equations Probability and Mathematical 3 PHY 221 P & P of Physics I ^ MTA **MATH 308** Statistics MATH 309 PHY 221L P & P of Physics I Lab ^ All 3 courses required Applied Statistics 4 Applied Physics for Scientists PHY 221R P & P of Physics Recitation ^ PHYS231 MATH 341 Abstract Algebra I 3 & Engineers 1 MATH 351 Graph Theory 3 (LSSU agrees to waive CSCI 103) MATH 401 Mathematical Modeling 3 MATH 411 Advanced Topics in Calculus 3 Individualized Research Topics **MATH 490** 3 in Mathematics One additional math course 3 LSSU Minor or Electives 21 Electives 14 TOTAL NMC CREDITS TOTAL ADDITIONAL LSSU CREDITS 62 62 TOTAL CREDITS 124 APPROVED BY: Dr. Marguerite Cotto Date Vice President for Lifelong and Professional Learning Northwestern Michigan College Provost & Vice President for Academic Affairs Lake Superior State University Dr. Stephen Siciliano Vice President for Educational Services

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.

Northwestern Michigan College