ARTICULATION AGREEMENT

Between

Bay de Noc Community College

Associate in Art Network Administration

and

Northern Michigan University

College of Arts and Sciences

Bachelor of Science in Mobile and Web Application Development

August 2015

ARTICULATION AGREEMENT

Between
Bay de Noc Community College
Associate in Art Network Administration
and
Northern Michigan University
College of Arts and Sciences
Bachelor of Science in Mobile and Web Application Development

Article I
Agreement on Principle

Northern Michigan University (NMU) and Bay de Noc Community College (Bay College) agree that students, who choose to transfer from a community college to a senior college or university to earn a bachelor's degree, should be provided with a smooth curriculum transition that minimizes loss of credit and duplication of coursework. Therefore, Northern Michigan University and Bay de Noc Community College agree to enter into this curriculum articulation agreement for students who complete the Associate in Arts Network Administration at Bay College and transfer to NMU to complete the Bachelor of Science Mobile and Web App Development degree. Both institutions enter into this agreement as cooperating, equal partners who shall maintain the integrity of their separate programs.

Article II
Agreement on Program Specifics

NMU and Bay College agree that any student who has successfully completed the minimum requirements outlined on the attached articulation guide may transfer the course credits indicated toward the baccalaureate degree at NMU. Students who follow this articulated program agreement must apply and be admitted to NMU. Bay College students will receive equal consideration with other students seeking admission and financial aid. The bachelor's degree graduation requirements for students who follow this articulated program agreement are listed on the attached articulation guide.

Article III
Agreement on Communication

NMU and Bay College agree to cooperate in communication with each other and with their common and respective publics concerning the established relationship between the two institutions. Communication may include the development of various kinds of publications to inform those who might benefit personally or professionally from the opportunities provided by this agreement. Faculty and staff at both institutions will share the information in this agreement with interested and qualified students and both institutions will provide counseling and advising to students and prospective students.

Article IV
Agreement on Maintenance and Review Procedures

At least one administrative member from each institution will be appointed to act as agents for the implementation of this agreement, to speak for the institutions and to communicate changes to respective faculty members, advisors, counselors, and others to whom the information is pertinent. Responsibility for oversight of this agreement rests with the Dean of Business and Technology at Bay de Noc Community College and the Mathematics and Computer Science Head at Northern Michigan University.

Both parties agree to communicate annually any changes in their respective programs that may affect this articulation agreement. During the third year, both parties will review the agreement for revision and possible renewal. If the agreement is not renewed by the end of the effective agreement, Bay de Noc Community College students who started the articulated program prior to termination of the agreement, will be given three additional years to be admitted to NMU under terms of this agreement.

This agreement is in effect from 1 August 2015 until 1 August 2018. *Note: Students, who began Bay College AA Network Administration prior to the effective date of this agreement, may use the agreement to the extent that the program requirements followed are consistent with this agreement.*

Introduction:

The purpose of this articulation agreement is to provide a smooth transition for students who want to earn an Associate in Art in Network Administration degree at Bay de Noc Community College (Bay College) prior to a transfer to Northern Michigan University (NMU) to complete a Bachelor of Science degree in Mobile and Web Application Development. As displayed in this document, the first and second years of coursework are completed at Bay de Noc Community College and third and fourth years at NMU.

This major is designed to offer students an education in the important world of Internet and network programming. This course of study emphasizes programming skills while concentrating on the latest concepts, architectures, and algorithms for network computation. Students will learn the fundamentals of Computer Science while focusing on aspects most important to the world of Mobile and Web Application Development. Graduates should be well prepared to design the next generation of network application architectures.

Effective Dates:

The effective dates of this agreement are from 1 August 2015 to 1 August 2018. If this agreement is not renewed at the end of the effective period, students who have already started this articulated program at Bay College will be given three additional years to be admitted to NMU under the terms of this agreement. Students, who began the program prior to the effective date, may use the agreement to the extent that the requirements completed are consistent with this agreement.

Transfer Credit:

Typically, Bay College students complete the first and second years of this degree at Bay College. The third and fourth years are taken at NMU. A maximum of 64 semester credits, and an additional four (4) semester credits in physical education (health promotion) activity courses may transfer to NMU from a two-year college. Unless otherwise designated, a grade of C- or higher is required for transfer to NMU. The following section displays courses taken by students from Bay College and at NMU. This list is not exclusive, other courses, particularly liberal studies courses, may also be transferred.

Courses taken at Bay de Noc Community College

General Education/MTA requirements*		30 credits
ENGL101	Rhetoric & Composition	3
ENGL102	Research Writing or	
	ENGL 145 Technical & Report Writing*	3
MATH110	College Algebra	4
XXXXxxx	Natural Science with Lab	4-5
XXXXxxx	Natural Science	3-5
XXXXxxx	Social Behavioral Science**	6
XXXXxxx	Humanities	6

(Courses in MTA must be a C or better)

Degree requirements:

CNSS130	Introduction to Networks	4
CNSS150	A+ Computer maintenance	4
CNSS230	Introduction to Unix Using Linux	4
CNSS231	Advanced Linux System Administration	4

CNSS250	Window Networking I	4
CNSS251	Windows Networking II	4
CSCI121	C++ Programming I	3
CSCI122	C++ Programming II	4
MATH210	Introduction to Statistics	4
PHED140	Physical Fitness: Appraisal & Dev OR	
	PHED141 Physical Fitness: A Wellness App	2

NMU Graduation Requirements:
*Students can fulfill NMU's Intermediate Composition requirement by completing: ENGL102 or ENGL145.
**Students can fulfill NMU"s World Cultures requirement by completing *one* of the following courses: ANTH 201, GEOG 121, GEOG 125, GEO G126, HIST 224, PHIL 202, or PHIL 230.

Courses taken at Northern Michigan University
Programming Core:
CS 120	Computer Science	4
CS 222	Data Structures	4
CS 326	Object-Oriented Design	3
CS 480	Senior Project in Computer Science	4

Mobile and Web Apps Development Core:
CS 228	Network Programming	3
CS 344	iOS/iPhone Programming	4
CS 345	Android Programming	4
CS 365	Web Programming	4
CS 465	Advanced Web Programming	3

Computer Science Elective   **4 credits**
Chosen in consultation with adviser

Minor   20 credits

Total minimum required to graduate   124 credits

Additional Graduation Requirements:

1. At least 32 credit hours of a major must be earned at NMU;
2. A minor must be declared.
3. A "C" grade or higher is required for all courses within major;
4. At least 4 credit hours of a minor must be earned at NMU;
5. No more than 64 credits plus and additional 4 credits of PE can be transfered into NMU.
6. A total of 124 credit hours are required for a BS in Mobile and Web Application Development
7. The Liberal Studies Program completed by the student must fulfill the Michigan Transfer Agreement.
8. Complete the Health Promotion requirement, which includes HP 200 and an HP activity course.
9. All requirements are subject to change. Check with your advisor for the latest requirements.

Notes to Students:

1. Michigan Transfer Agreement (MTA): Students should complete the requirements of the Michigan Transfer Agreement. Students who successfully complete the MTA, certified on the Bay transcript, will be considered to have met the requirements of NMU's Liberal Studies/General Education program. Students will still be expected to complete all other degree requirements, including graduation requirements (English writing competency, math competency, world cultures, health promotions, and lab) and any courses listed as "Other Required Courses" that may also be Liberal Studies/General Education

courses. Students should work with their adviser to ensure they are selecting general education courses that will also meet these graduation requirements.

2. Complete the articulated program as indicated in this articulation guide. Any course substitutions should only be made with the guidance of an advisor or counselor to assure that all requirements are met;

3. Students are encouraged to meet with the relevant NMU faculty at NMU early, before completing an admission application to NMU.