

MINNESOTA STATE COLLEGES AND  
UNIVERSITIES\*  
ARTICULATION AGREEMENT  
BETWEEN

NORTHLAND COMMUNITY AND TECHNICAL  
COLLEGE  
AND  
MINNESOTA STATE UNIVERSITY MOORHEAD

\*The Board of Trustees of the Minnesota State Colleges and Universities is authorized by Minnesota Statutes, Chapter 136F to enter into Agreements and has delegated this authority to colleges and universities.

This Agreement is entered into between **NORTHLAND COMMUNITY AND TECHNICAL COLLEGE** (hereinafter sending institution), and **MINNESOTA STATE UNIVERSITY MOORHEAD** (hereinafter receiving institution). This Agreement and any amendments and supplements, shall be interpreted pursuant to the laws of the State of Minnesota.

The sending institution has established the following programs (hereinafter sending program):

**Architectural Technology and Design AAS, 15.1303**

**Auto Body Collision Technology AAS, 47.0603**

**Automotive Service Technology AAS, 47.0604**

**Aviation Maintenance Technology AAS, 47.0607**

**Computer and Network Technology AAS, 11.0901**

**Electronics Technology – Automated Systems AAS, 15.0406**

**Fire Technology AAS, 43.0201**

**Heating Ventilation & Air Conditioning/ Construction Plumbing AAS, 47.0201**

**Radiologic Technology AAS, 51.0911**

and the receiving institution has established an **Operations Management, BS** (hereinafter receiving program), and will facilitate credit transfer and provide a smooth transition from one related program to another. It is mutually agreed:

**Admission and Graduation Requirements**

- A. The receiving institution's admission and program admission requirements apply to both direct entry students and to students who transfer under this agreement.
- B. Students must fulfill the graduation requirements at both institutions.
- C. Students must complete the entire sending program and meet the receiving institution's admission requirements for the agreement to apply, including grade requirements for courses and an overall GPA requirement.

**Transfer of Credits**

- A. The receiving institution will accept **53 - 70 credits** from the sending program. A total of **56 - 63 credits** remain to complete the receiving program.
- B. Courses will transfer as described in the attached Program Articulation Table. For system institutions, once the courses are encoded, they will transfer as described in the "Transferology" audit.

**Implementation and Review**

- A. The Chief Academic Officers or designees of the parties to this agreement will implement the terms of this agreement, including identifying and incorporating any changes into subsequent agreements, assuring compliance with system policy, procedure and guidelines, and conducting a periodic review of this agreement.

- B. This Articulation Agreement is effective on 7/01/2015 and shall remain in effect until the end date of 7/01/2020 or for five years, whichever occurs first, unless terminated or amended by either party with 90 days prior written notice.
- C. The college and university shall work with students to resolve the transfer of courses should changes to either program occur while the agreement is in effect.
- D. This Articulation Agreement will be reviewed by both parties beginning 1/01/2020 (within six months of the end date).
- E. When a student notifies the receiving institution of their intent to follow this agreement, the receiving institution will encode course waivers and substitutions.

| <b>PROGRAM ARTICULATION TABLE</b>  |   |   |
|--|---|---|
|  | <b>College (sending)</b>  | <b>University (receiving)</b>   |
| Institution  | Northland Community and Technical College   | Minnesota State University Moorhead   |
| Program name   | Architectural Technology and Design AAS, (69 credits), 15.130302<br>Auto Body Collision Technology AAS, (71 credits), 47.060300<br>Automotive Service Technology AAS, (73 credits), 47.060400/ 47.060401<br>Aviation Maintenance Technology AAS,(100 credits), 47.060700<br>Computer and Network Technology AAS, (60 credits), 11.090100<br>Electronics Technology – Automated Systems AAS, (60 credits), 15.0406<br>Fire Technology AAS, (62 credits), 43.020100<br>Heating Ventilation & Air Conditioning/ Construction Plumbing AAS, (70 credits), 47.020101<br>Radiologic Technology AAS, (83 credits), 51.091100 | Operations Management   |
| Award Type (e.g., AS)  | AAS   | BS  |
| Credit Length  | (See above)   | 120   |
| CIP code (6-digit)   | (See above)   | 52.020500   |
| Describe program admission requirements (if any)   |   | AAS with 30+ prescribed technical credits, as prescribed by program's accrediting board, The Association of Technology, Management, and Applied Engineering (ATMAE) |
| <b>Instructions</b>  |   |   |
| <ul style="list-style-type: none"> <li>• List all required courses in both academic programs.</li> </ul> |   |   |

- MnTC goal areas transfer to the receiving institution according to the goal areas designated by the sending institution.
- Do not indicate a goal area for general education courses that are not part of the MnTC.
- For restricted or unrestricted electives, list number of credits.
- Credits applied: the receiving institution course credit amount may be more or less than the sending institution credit amount. Enter the number of credits that the receiving institution will apply toward degree completion.
- Show equivalent university-college courses on the same row to ensure accurate DARS encoding.
- Equiv/Sub/Wav column: If a course is to be encoded as equivalent, enter Equiv. If a course is to be accepted by the university as a "substitution" only for the purposes of this agreement, enter Sub. If a course requirement is waived by the receiving institution, enter Wav. If a course is to be accepted by the university as a MnTC goal area, restricted elective or unrestricted elective, leave the cell blank.

(To add rows, place cursor outside of the end of a row and press enter.)

### SECTION A - Minnesota Transfer Curriculum-General Education

| College (sending)   |                      |         | University (receiving)         |                      |                 |               |
|---|----------------------|---------|--------------------------------|----------------------|-----------------|---------------|
| course prefix, number and name  | Goal(s) <sup>1</sup> | Credits | course prefix, number and name | Goal(s) <sup>1</sup> | Credits Applied | Equiv Sub Wav |
| <b>Minnesota Transfer Curriculum-General Education</b>  |                      |         |                                |                      |                 |               |
| General Education Requirements<br><br>Students must select from at least three (3) of the (10) goal areas of the MNTC<br><br>Architectural Technology and Design AAS, (15 credits)<br>Auto Body Collision Technology AAS, (15 credits)<br>Automotive Service Technology AAS, (15 credits)<br>Aviation Maintenance Technology AAS, (15 credits)<br>Computer and Network Technology AAS, (15 credits)<br>Electronics Technology – Automated Systems AAS, (15 credits)<br>Fire Technology AAS, (16 credits), 43.020100<br>Heating Ventilation & Air Conditioning/ Construction Plumbing AAS, (15 credits)<br>Radiologic Technology AAS, (22 credits) |                      |         | MnTC General Education Courses | 1 - 10               | 15 - 22         |               |
| <b>MnTC/General Education Total</b>   |                      |         |                                |                      | <b>15 - 22</b>  |               |

**Special Notes:** MSUM will accept other MnTC credits and will transfer the same number of credits and goal areas as NCTC awards. Students should work with their advisor at NCTC and MSUM to choose the best general education courses to take at NCTC.

ENGL 1111 Composition I (3 cr) is equivalent to MSUM ENGL 101 English Composition I, Goal Area 1B, 2.

ECON 2201 Microeconomics (3 cr) is equivalent to MSUM ECON 202 Principles of Economics: Micro, Goal Area 5.

MATH 1110 College Algebra (3 cr) is equivalent to MSUM MATH 127 College Algebra, Goal Area 4.

MATH 2203 Statistics (4 cr) is equivalent to MSUM MATH 234 Probability & Statistics, Goal Area 4.

CHEM 1020 Intro to Chemistry (4 cr) is equivalent to MSUM CHEM 102 Environmental Science Goal Area 3.

<sup>1</sup> MnTC goal areas transfer to the receiving MnSCU college/university according to the goal areas designated by the sending college/university

PHYS 1111 General Physics I (4 cr) is equivalent to MSUM PHYS 160 College Physics I & Lab Goal Area 3.  
 PHYS 1112 General Physics II (4 cr) is equivalent to MSUM PHYS 161 College Physics II & Lab Goal Area 3.

**SECTION B - Major, Emphasis, Restricted and Unrestricted Electives or Other**

(pre-requisite courses, required core courses, required courses in an emphasis, or electives (restricted or general) within the major). Restricted electives (in Major) fulfill a specific requirement within a major. Example A: "Chose two of the following three courses;" Example B: A Biology degree may require 40 science credits (20 credits of required courses + 20 credits of listed related courses, such as botany, genetics, sociobiology, etc. which students can select).

| Major, Emphasis, Restricted, Unrestricted Electives or Other Courses            |         |   |          |
|---|---------|---|----------|
| Technical credits as prescribed in program                                      |         | Technical Credits as prescribed in the program                                | 30       |
| Architectural Technology and Design AAS, (54 credits)                           |         | Additional credits up to 18 will be applied as unrestricted elective credits* | Up to 18 |
| Auto Body Collision Technology AAS, (56 credits)                                |         |   |          |
| Automotive Service Technology AAS, (58 credits)                                 |         |   |          |
| Aviation Maintenance Technology AAS, (84 credits)                               |         |   |          |
| Computer and Network Technology AAS, (38 - 44 credits)**                        |         |   |          |
| Electronics Technology – Automated Systems AAS, (42 credits)**                  |         |   |          |
| Fire Technology AAS, (46 credits), 43.020100                                    |         |   |          |
| Heating Ventilation & Air Conditioning/ Construction Plumbing AAS, (55 credits) |         |   |          |
| Radiologic Technology AAS, (61 credits)   |         |   |          |
| CRLT 2103 Job Seeking/ Keeping (1)  |         | Not Applicable  | 0        |
| <b>Major, Emphasis, Unrestricted Electives Total</b>                            | 45 - 85 | <b>Total College Credits Applied (sum of sections A and B)</b>                | 53 - 70  |

**Special Notes:** \* No more than 48 technical credits will be applied as elective credit. If the program doesn't have that many technical credits, that lower number of credits will be applied. \*\* Not all the elective options will transfer as technical, only those in the same rubric as the program itself.

**SECTION C - Remaining University (receiving) Requirements**

| course prefix, number and name                        | Credits |
|---|---------|
| Remaining MnTC/ LASC Goal Requirements*               | 20 - 27 |
| ACCT 230 Principles of Accounting I                   | 3       |
| MGMT 360 Principles of Management                     | 3       |
| OM 380 Methods Improvement                            | 3       |
| OM 393 Occupational Safety & Health                   | 3       |
| OM 482 Quality Planning & Implementation              | 3       |
| OM 394 Computer Applications in Business              | 3       |
| OM 483 Cost Analysis                                  | 3       |
| OM 485 Production & Inventory Management              | 3       |
| PMGT 300 Project Management & Scheduling              | 3       |
| PMGT 385 Process Leadership                           | 3       |
| ENGL 387 Technical Report Writing                     | 3       |
| OM 469 Internship                                     | 3       |
| Electives if needed**                                 | Up to 4 |
| <b>Total Remaining University Credits<sup>2</sup></b> | 56 - 63 |

**Special Notes, if any:** \*The General Education courses listed below are required for the Operations Management BS degree. Equivalent courses can be taken at NCTC (see Section A Notes).

**Students only need to select two science courses (one course must include a lab and the other must include a lab like experience), one course must be from Chemistry and the other from Physics.**

Choose one Chemistry course from the following:

CHEM 102 Environmental Chemistry (3) OR

CHEM 105 Crime Scene Science (3) OR  
 CHEM 110 Fundamentals of Chemistry (3) **and**  
 CHEM 110L Fundamentals of Chemistry Lab (1) OR  
 CHEM 150 General Chemistry I (3) **and**  
 CHEM 150L General Chemistry Laboratory I (1) OR  
 CHEM 304 The Environment and You (3)  
 PHYS 160 College Physics I (3) **and**  
 PHYS 160L College Physics I Lab (1)  
 ECON 202 Principles of Economics I: Micro (3)  
 MATH 127 College Algebra (3)  
 MATH 234 Introduction to Probability and Statistics (3)

\*\*Number of elective credits required to bring the total of credits earned to 120 varies.



### SECTION D - Summary of Total Program Credits

| College (sending) Credits                        |             | University (receiving) Requirements   |              |
|--|-------------|---|--------------|
| MnTC/General Education                           | 15 -<br>22  |   |              |
| Major, Emphasis, Unrestricted Electives or Other | 45 -<br>85  |   |              |
| <b>Total College Credits</b>                     | 60 -<br>100 | <b>Total College Credits Applied</b>  | 53 - 70      |
|  |             | <b>Remaining credit to be taken at the university (receiving institution)</b> | 56 - 63      |
|  |             | <b>Total Program Credits</b>  | 120 -<br>126 |

**Special Notes, if any:**

<sup>2</sup> At least 40 of the required credits for the baccalaureate degree shall be at the upper-division level. If a lower division course is shown as equivalent to an upper division course, check with the university to determine if it will count toward the 40 required credits of upper division.

| College                | Name                | Signature | Date      |
|------------------------|---------------------|-----------|-----------|
| Academic Dean          | Curtis Zoller       |           | 7/27/15   |
| Academic Dean          | Mike Curfman        |           | 7-16-15   |
| Academic Dean          | Jodi Stauss-Stassen |           | 7-15-15   |
| Academic Dean          | Brian Huschle       |           | 7-14-15   |
| Chief Academic Officer | Carey Castle        |           | 16 Sep 15 |
| University             | Name                | Signature | Date      |
| Department Chairperson | Pam McGee           |           | 9-23-15   |
| Academic Dean          | Dr. Marsha Weber    |           | 7-5-15    |

|   |                   |  |         |
|---|-------------------|--|---------|
| Chief Academic Officer  | Dr. Joseph Bessie |  | 11/9/15 |
| DARS Encoder  | Tara Spletstoser  |  | 6/2016  |
| Date when equivalencies were verified/encoded in DARS by the receiving MnSCU institution. |                   |  |         |