| MINNESOTA STATE COLLEGES AND UNIVERSITIES* ARTICULATION AGREEMENT BETWEEN | Northcentral 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 **Northcentral 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 (hereinafter sending program):

Architectural Design & Technology, AAS
Automotive Technology, AAS
Electromechanical Technology, AAS
Graphic Communication Technologies, AAS
IT - Computer Support Specialist, AAS
IT – Mobile Application Developer, AAS
IT - Network Specialist, AAS
IT – Software Developer, AAS
IT - Web Designer, AAS
Manufacturing Engineering Technology, AAS
Mechanical Design Technology, AAS
Safety Engineering Technology, AAS
Welding Fabrication & Robotics, AAS
Wood Science, AAS

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.

**Transfer of Credits**

A. The receiving institution will accept **50 - 63 credits** from the sending program. A total of **60 - 70 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 **09/04/2018** and shall remain in effect until the end date of **09/04/2023** 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 **03/04/2023** (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.

## PROGRAM ARTICULATION TABLE

|  | College (sending) | University (receiving) |
|---|---|---|
| Institution | **Northcentral Technical College** | **Minnesota State University Moorhead** |
| Program name/ Award Type (e.g., AS)/ CIP code (8-digit) | Architectural Design & Technology, AAS<br>Automotive Technology, AAS<br>Electromechanical Technology, AAS<br>Graphic Communication Technologies, AAS<br>IT - Computer Support Specialist, AAS<br>IT - Mobile Application Developer, AAS<br>IT - Network Specialist, AAS<br>IT - Software Developer, AAS,<br>IT - Web Designer, AAS<br>Manufacturing Engineering Technology, AAS<br>Mechanical Design Technology, AAS<br>Safety Engineering Technology, AAS<br>Welding Fabrication & Robotics, AAS<br>Wood Science, AAS | Operations Management, BS, 120 credits, 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) |

### Instructions

- List all required courses in both academic programs.
- 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 (The following courses are requirements of the BS degree, but may not be required of the diploma or associate's programs. Students are encouraged to take these courses within their AAS, or Diploma program. MSUM will also accept all other General Education courses prescribed in the student's AAS or Diploma) | Goal(s)[1] | Credits | course prefix, number and name | Goal(s)[1] | Credits Applied | Equiv Sub Wav |
| Minnesota Transfer Curriculum-General Education | | | | | | |
| General Education Requirements<br>Architectural Design & Technology, AAS (14 – 20 cr)<br>Automotive Technology, AAS (12 cr)<br>Electromechanical Technology, AAS (19 – 22 cr)<br>Graphic Communication Technologies, AAS (15 cr)<br>IT - Computer Support Specialist, AAS (9 cr)<br>IT – Mobile Application Devel, AAS (15 cr)<br>IT - Network Specialist, AAS (9 cr)<br>IT – Software Developer, AAS (15 cr)<br>IT - Web Designer, AAS (15 cr)<br>Manufacturing Eng Technology, AAS (15 – 18 cr)<br>Mechanical Design Technology, AAS (13 – 16 cr)<br>Safety Engineering Technology, AAS (15 – 18 cr)<br>Welding Fabrication & Robotics, AAS (12 cr)<br>Wood Science, AAS (12 cr) | | | MNTC General Education courses | 1 - 10 | 9 - 20 | |
| 804-107 College Mathematics (3), 804-118 Intermediate Algebra w Apps (4), 804-133 Math & Logic (3), 806-139Survey of Physics (3), 809-103 Think Critically & Creatively (3) | | | Not Applicable | | 0 | |
| **MnTC/General Education Total** | | 9 - 22 | | | | |

**Special Notes, if any:**

MSUM will also accept other General Education credits as they align with the LASC goal areas and will transfer the same number of credits to transferrable goal area.
801-136 English Composition I is equivalent to MSUM ENGL 101 English Composition I (Goal 1)
801-196 Oral/ Interpersonal Communication is equivalent to MSUM COMM 100 Speech Communication (Goal 1)
804-195 College Algebra w Apps is equivalent to MSUM MATH 127 College Algebra (Goal 4)
806-154 General Physics I is equivalent to MSUM PHYS 160/ 160L College Physics I (Goal 3)
809-195 Economics is equivalent to MSUM ECON 100 the American Economy (Goal 2)

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[1] MnTC goal areas transfer to the receiving college/university according to the goal areas designated by the sending college/university

809-198 Intro to Psychology is equivalent to MSUM PSY 113 General Psychology (Goal 5)
809-196 Intro to Sociology is equivalent to MSUM SOC 110 Intro to Sociology (Goal 5)
809-166 Intro to Ethics: Theory & App satisfies MSUM Goal 9.

## 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: Architectural Design & Technology, AAS (44 cr) Automotive Technology, AAS (46 cr) Electromechanical Technology, AAS (41 cr) Graphic Communication Technologies, AAS (45 cr) IT - Computer Support Specialist, AAS (41 cr) IT – Mobile Application Devel, AAS (49 cr) IT - Network Specialist, AAS (41 cr) IT – Software Developer, AAS (46 cr) IT - Web Designer, AAS (46 cr) Manufacturing Eng Technology, AAS (41 cr) Mechanical Design Technology, AAS (44 cr) Safety Engineering Technology, AAS (40 cr) Welding Fabrication & Robotics, AAS (44 cr) Wood Science, AAS (44 cr) | | Technical credits accepted in transfer as a block  Additional credits up to 18 will be applied as unrestricted elective credits | 30  Up to 18 | |
| | | | | |
| | | | | |
| 801-197 Technical Reporting (3), 152-398 IT Career Skills (1), 152-399 IT Internship (1) | | Not Applicable | 0 | |
| **Major, Emphasis, Unrestricted Electives Total** | 40 - 49 | **Total College Credits Applied (sum of sections A and B)** | 50 - 63 | |

## SECTION C - Remaining University (receiving) Requirements

| | course prefix, number and name | Credits |
|---|---|---|
| | Remaining MnTC/ LASC Goal Requirements | 22 – 33 |
| | ACCT 230 Principles of Accounting I | 3 |
| | MGMT 260 Principles of Management | 3 |
| | OM 380 Methods Improvement | 3 |
| | OM 393 Occupational Safety & Health | 3 |
| | OM 482 Quality Planning & Implementation | 3 |
| | OM 395 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* (Consult with MSUM advisor for best choices.) | 0 - 2 |
| | | |
| | **Total Remaining University Credits** | 60 - 70 |

**Special Notes, if any:**
**The General Education courses listed below are required for the Operations Management BS degree. Equivalent courses can be taken at Northcentral (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). **Students should work with their MSUM advisor to take the best courses to fulfill the MnTC/ LASC goal areas.**
ECON 202 Principles of Economics I: Micro (3) (Goal 5)
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** | 9 - 22 | | |
| **Major, Emphasis, Unrestricted Electives or Other** | 40 - 49 | | |
| **Total College Credits** | 60 - 64 | **Total College Credits Applied** | 50 - 63 |
| | | **Remaining credit to be taken at the university (receiving institution)** | 60 - 70 |
| | | **Total Program Credits** | 120 – 126 |
| **Special Notes, if any:** | | | |

| College | Name | Signature | Date |
|---|---|---|---|
| President | Lori Weyers | *[signature]* | 9/2,/ |
| Executive Vice President | Jeannie Worden | *Jeannie Worden* | 9/19/18 |
| Vice President for Learning | Darren Ackley | *Darren Ackley* | 9/23/18 |
| | | | |
| Title | | | |
| University | Name | Signature | Date |
| Department Chairperson | Joshua Behl | *[signature]* | 10/9/18 |
| Academic Dean | Denise Gorsline | *Denise Gorsline* | 10-10-18 |
| Chief Academic Officer | Marsha Weber | *Marsha Weber* | 10-15-18 |
| DARS Encoder | Jolene Richardson | *Jolene Richardson* | 11/30/18 |

Date when equivalencies were encoded in DARS by the receiving MnSCU institution.

August, 2018