

MINNESOTA STATE COLLEGES AND  
UNIVERSITIES\*  
ARTICULATION AGREEMENT  
BETWEEN

MINNEAPOLIS 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 MINNEAPOLIS 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):

**CNC Machinist AAS, 60 credits 48.0510**

**Computer Forensics AAS, 60 credits 11.100300**

**Computer Software Development AAS, 60 credits 11.020100**

**Computer Support & Network Administration AAS, 60 credits 11.090100**

**Graphic Design: Print Media AAS, 66 credits 50.040100**

**Graphic Design: Web & Interactive Media AAS, 66 credits 11.0801**

**Heating, Ventilation, Air Conditioning & Refrig AAS, 72 credits 47.020100**

**Photography & Digital Imaging AAS, 60 credits 50.040600**

**Welding & Metal Fabrication AAS, 60 credits 48.0508**

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 56 - 66 credits from the sending program. A total of 60 - 64 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 9/01/2015 and shall remain in effect until the end date of 9/01/2020 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 03/01/2020 (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>
<b>Institution</b>	Minneapolis Community & Technical College	Minnesota State University Moorhead
<b>Program name</b>	CNC Machinist AAS, 60 credits 48.0510 Computer Forensics AAS, 60 credits 11.100300 Computer Software Development AAS, 60 credits 11.020100 Computer Support & Network Administration AAS, 60 credits 11.090100 Graphic Design: Print Media AAS, 66 credits 50.040100 Graphic Design: Web & Interactive Media AAS, 66 credits 11.0801 Heating, Ventilation, Air Conditioning & Refrig AAS, 72 credits 47.020100 Photography & Digital Imaging AAS, 60 credits 50.040600 Welding & Metal Fabrication AAS, 60 credits 48.0508	Operations Management
<b>Award Type (e.g., AS)</b>	AAS	BS
<b>Credit Length</b>	(See above)	120
<b>CIP code (6-digit)</b>	(See above)	52.020500
<b>Describe program admission requirements (if any)</b>		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> <li>• MnTC goal areas transfer to the receiving institution according to the goal areas designated by the sending institution.</li> <li>• Do not indicate a goal area for general education courses that are not part of the MnTC.</li> </ul>		

- 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
Minnesota Transfer Curriculum-General Education						
General Education Requirements  Students must select from at least three (3) of the (10) goal areas of the MNTC CNC Machinist AAS, (15 cr) Computer Forensics AAS, (27 cr) Computer Software Development AAS, (15) Computer Support & Network Administration, (15 cr) Graphic Design: Print Media AAS, (18 cr) Graphic Design: Web & Interactive Media AAS, (18 cr) Heating, Ventilation, Air Conditioning & Refrig AAS, (15 cr) Photography & Digital Imaging AAS, (15 cr) Welding & Metal Fabrication AAS, (15 cr)			MnTC General Education Courses	1 - 10	15 - 27	
<b>MnTC/General Education Total</b>		15 - 27				

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

CMST 1005 Public Speaking (3cr) is equivalent to MSUM COMM 100 Speech Communication, Goal Area 1.  
 ENGL 1110 College Engl I (3 cr) is equivalent to MSUM ENGL 101 English Composition I, Goal Area 1B.  
 ECON 2200 Principles of Microeconomics (3 cr) is equivalent to MSUM ECON 202 Principles of Economics: Micro, Goal Area 5.  
 MATH 1110 College Algebra (4 cr) is equivalent to MSUM MATH 127 College Algebra, Goal Area 4.  
 MATH 1150 Statistical Analysis (4 cr) is equivalent to MSUM MATH 234 Intro to Probability & Statistics, Goal Area 4.  
 CHEM 1020 Intro to Chemistry (4 cr) is equivalent to MSUM CHEM 102 Environmental Chemistry Goal Area 3.  
 CHEM 1151 Principles of Chemistry I (5 cr) is equivalent to MSUM CHEM 150/ 150L General Chemistry I Goal Area 3.  
 PHYS 1131 College Physics I (5 cr) is equivalent to MSUM PHYS 160 College Physics I & Lab Goal Area 3.

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

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

(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 CNC Machinist AAS, (39 – 41) Computer Forensics AAS, (31 cr) Computer Software Development AAS, (43 cr) Computer Support & Network Administration, (43 cr) Graphic Design: Print Media AAS, (42 cr) Graphic Design: Web & Interactive Media AAS, (42 cr) Heating, Ventilation, Air Conditioning & Refrig AAS, (54 cr) Photography & Digital Imaging AAS, (41 cr) Welding & Metal Fabrication AAS, (45 cr)		Technical Credits as prescribed in the program  Additional credits up to 18 will be applied as unrestricted elective credits*	30  Up to 18
ITEC 2950 Information Technology Career Prep (2), GRPH 2540 Career Planning/ Professional Practices (3), GRPH 2550 Portfolio Prep/ Exhibit (3), MTTC 1015 Applied Machine Shop Math 1 (2), MTTC 1515 Applied Machine Shop Math 2 (2), MTTC 1030 Machine Trades for Related Careers (2), PHDI 2210 Portfolio Development & Presentation (4)		Not Applicable	0
<b>Major, Emphasis, Unrestricted Electives Total</b>	31 - 45	<b>Total College Credits Applied (sum of sections A and B)</b>	56 - 66

**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.

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

course prefix, number and name	Credits
Remaining MnTC/ LASC Goal Requirements	15 - 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 469 Internship	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
Electives if needed*	0 - 11
<b>Total Remaining University Credits<sup>2</sup></b>	<b>60 - 64</b>

**Special Notes: The General Education courses listed below are required for the Operations Management BS degree. Equivalent courses can be taken at MCTC (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 - 27		
Major, Emphasis, Unrestricted Electives or Other	31 - 54		
<b>Total College Credits</b>	60 - 72	<b>Total College Credits Applied</b>	56 - 66
		<b>Remaining credit to be taken at the university (receiving institution)</b>	60 - 64
		<b>Total Program Credits</b>	120 - 126
<b>Special Notes, if any:</b>			

<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
Chief Academic Officer	Dr. Gail O'Kane		
	VP Academic Affairs	<i>Gail O'Kane</i>	8-25-15
Title			
Academic Dean	Name	Signature	Date
	Dr. Zala Fashant	<i>Zala Fashant</i>	8-25-15
University	Name	Signature	Date
Department Chairperson	Pam McGee	<i>Pam McGee</i>	9-11-15
Academic Dean	Dr. Marsha Weber	<i>Marsha Weber</i>	12-7-15
Chief Academic Officer	Dr. Joseph Bessie	<i>Joseph Bessie</i>	12/8/15
DARS Encoder	Tara Spletstoser	<i>Tara Spletstoser</i>	2/12/16
Date when equivalencies were verified/encoded in DARS by the receiving MnSCU institution.			