

**MINNESOTA STATE COLLEGES AND  
UNIVERSITIES\*  
ARTICULATION AGREEMENT  
BETWEEN**

**MINNESOTA WEST 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 **MINNESOTA WEST 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 programs):

**AUTOMOTIVE TECHNICIAN DIPLOMA 47.060400**  
**COMPUTER ENGINEERING TECHNOLOGY DIPLOMA 15.120100**  
**COMPUTER NETWORKING SPECIALIST DIPLOMA 11.090101**  
**COMPUTER SUPPORT TECHNICIAN DIPLOMA 15.120200**  
**DIESEL MECHANICS (AG & TRUCK) DIPLOMA 47.060503**  
**DIESEL TECHNICIAN (AG & TRUCK) DIPLOMA 47.060502**  
**ELECTRIC UTILITY SUBSTATION TECHNOLOGY DIPLOMA 46.030100**  
**ELECTRICIAN DIPLOMA 46.030200**  
**FLUID POWER TECHNOLOGY DIPLOMA 15.110300**  
**INDUSTRIAL TECHNOLOGY DIPLOMA,**  
**POWERLINE DIPLOMA, 46.030301**  
**POWERLINE TECHNOLOGY DIPLOMA 46.030300**  
**POWER SPORTS TECHNOLOGY DIPLOMA,**  
**WELDING DIPLOMA,**

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 **30 - 58 credits** from the sending program. A total of **68 - 90 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**

July 6, 2011

- 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 04/01/2016 and shall remain in effect until the end date of 04/01/2021 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 10/01/2020 (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>	MINNESOTA WEST COMMUNITY AND TECHNICAL COLLEGE	MINNESOTA STATE UNIVERSITY MOORHEAD
<b>Program name</b>	AUTOMOTIVE TECHNICIAN DIPLOMA, 64 credits, 47.060400 COMPUTER ENGINEERING TECHNOLOGY DIPLOMA, 48 credits, 15.120100 COMPUTER NETWORKING SPECIALIST DIPLOMA, 48 CREDITS, 11.090101 COMPUTER SUPPORT TECHNICIAN DIPLOMA, 60 credits, 15.120200 DIESEL MECHANICS (AG & TRUCK) DIPLOMA, 35 credits, 47.060503 DIESEL TECHNICIAN (AG & TRUCK) DIPLOMA, 35 credits, 47.060502 ELECTRIC UTILITY SUBSTATION TECHNOLOGY DIPLOMA, 60 credits, 46.030100 ELECTRICIAN DIPLOMA, 74 credits, 46.030200 FLUID POWER TECHNOLOGY DIPLOMA, 67 credits 15.110300 INDUSTRIAL TECHNOLOGY DIPLOMA, 44 credits POWERLINE DIPLOMA, 38 credits, 46.030301	OPERATIONS MANAGEMENT

	POWERLINE TECHNOLOGY DIPLOMA, 61 credits 46.030300 POWER SPORTS TECHNOLOGY DIPLOMA, 32 credits, WELDING DIPLOMA, 32 credits,	
Award Type (e.g., AS)	Diploma	BS
Credit Length	See above.	120
CIP code (6-digit)	See above.	52.020500
Describe program admission requirements (if any)		Diploma with 30 or more 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	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						
AUTOMOTIVE TECHNICIAN DIPLOMA, (0 - 10 cr)						
COMPUTER ENGINEERING TECHNOLOGY DIPLOMA, (0 - 10 cr)						
COMPUTER NETWORKING SPECIALIST DIPLOMA (0 - 10 cr)						
COMPUTER SUPPORT TECHNICIAN DIPLOMA, (10 cr)						
DIESEL MECHANICS (AG & TRUCK) DIPLOMA, (0 - 3 cr)						
DIESEL TECHNICIAN (AG & TRUCK) DIPLOMA, (0 - 2 cr)			MnTC General Education Courses	1 - 10	0 - 10	

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

ELECTRIC UTILITY SUBSTATION TECHNOLOGY DIPLOMA, (0 – 10 cr) ELECTRICIAN DIPLOMA, (8 cr) FLUID POWER TECHNOLOGY DIPLOMA, (0 – 10 cr) INDUSTRIAL TECHNOLOGY DIPLOMA, (0 cr) POWERLINE DIPLOMA, (0 cr) POWERLINE TECHNOLOGY DIPLOMA, (0 – 7 cr) POWER SPORTS TECHNOLOGY DIPLOMA, (0 cr) WELDING DIPLOMA, (0 cr)						
<b>MnTC/General Education Total</b>		0 - 10				
<p><b>Special Notes:</b> MSUM will accept other MnTC credits and will transfer the same number of credits and goal areas as MN West awards. Students should work with their advisor at MN West and MSUM to choose the best general education courses to take.</p> <p>ENGL 1101 Composition I (3 cr) is equivalent to MSUM ENGL 101 English Composition I, Goal Area 1B.</p> <p>SPCH 1101 Intro to Speech (3 cr) is equivalent to MSUM COMM 100 Speech Communication, Goal Area 1A.</p> <p>BIOL 1110 Principles of Biology (4 cr) transfers as Goal 3L.</p> <p>BIOL 1115 Human Biology (3 cr) is equivalent to MSUM BIOL 104 Human Biology , Goal 3.</p> <p>NSCI 1100 Issues in the Environment (3 cr) transfers as Goal Areas 8, 10.</p> <p>PHYS 1100 Survey of Physics (3 cr) transfers as Goal 3L.</p> <p>MATH 1100 Integrated Math doesn't transfer.</p> <p>MATH 1107 Concepts in Math (3 cr) is equivalent to MSUM MATH 105 Contemporary Mathematics, Goal 4.</p> <p>MATH 1111 College Algebra (3 cr) is equivalent to MSUM MATH 127 College Algebra, Goal 4.</p> <p>PSYC 1150 Developmental Psychology (3 cr) transfers as Goal Areas 5, 7.</p> <p>SOC 1101 Intro to Sociology (3 cr) is equivalent to MSUM SOC 110 Intro to Sociology, Goal Area 5.</p>						
<p align="center"><b>SECTION B - Major, Emphasis, Restricted and Unrestricted Electives or Other</b></p> <p><small>(pre-requisite courses, required core courses, required courses in an emphasis, or electives (restricted or general) within the major). <b>Restricted electives (in Major)</b> 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).</small></p>						
<p><b>Major, Emphasis, Restricted, Unrestricted Electives or Other Courses</b></p>						
Technical credits as prescribed in program AUTOMOTIVE TECHNICIAN DIPLOMA, (54 - 64 cr) COMPUTER ENGINEERING TECHNOLOGY DIPLOMA, (31 - 41 cr) COMPUTER NETWORKING SPECIALIST DIPLOMA (30 - 40 cr) COMPUTER SUPPORT TECHNICIAN DIPLOMA, (44-50 cr) DIESEL MECHANICS (AG & TRUCK) DIPLOMA, (32 cr) DIESEL TECHNICIAN (AG & TRUCK)		Technical Credits as prescribed in the program  Additional credits up to 18 will be applied as unrestricted elective credits*	30  Up to 18			

DIPLOMA, (33 cr) ELECTRIC UTILITY SUBSTATION TECHNOLOGY DIPLOMA, (41 - 53 cr) ELECTRICIAN DIPLOMA, (66 cr) FLUID POWER TECHNOLOGY DIPLOMA, (49 - 67 cr) INDUSTRIAL TECHNOLOGY DIPLOMA, (42 cr) POWERLINE DIPLOMA, (36 - 37 cr) POWERLINE TECHNOLOGY DIPLOMA, (45 - 50 cr) POWER SPORTS TECHNOLOGY DIPLOMA, (32 cr) WELDING DIPLOMA, (32 cr)			
EMS 1112 AHA CPR Healthcare Provider (1). ACCT 1120 Spreadsheets (2), ACCT 1122 Database Concepts (2) ADSA 1100 College Keyboarding I (3), ADSA 1122 Word Processing I (2), ADSA 1190 Presentations Graphics (2), CMAE 1514 Safety Awareness (2), CSCI 1105 Intro to Microcomputers (3), GSCL1101 Job Seeking Skills (1), ELTL 1101 Basic Telecommunications (3), ELUT 2135 Enrichment I (2), ELUT 2140 Enrichment II (2), GSCM 1120 Technical Writing (2), GSSS 1100 Human Relations (2).		Not Applicable	0
<b>Major, Emphasis, Unrestricted Electives Total</b>	32 - 67	<b>Total College Credits Applied (sum of sections A and B)</b>	30 - 58
<b>Special Notes:</b> * 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*	32 - 42
	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 **	0 - 12
	<b>Total Remaining University Credits<sup>2</sup></b>	<b>68 - 90</b>

**Special Notes: Special Notes: \*The General Education courses listed below are required for the Operations Management BS degree. Equivalent courses can be taken at MN West (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	0 - 10		
Major, Emphasis, Unrestricted Electives or Other	30 - 57		
<b>Total College Credits</b>	32 - 67	<b>Total College Credits Applied</b>	30 - 58
		<b>Remaining credit to be taken at the university (receiving institution)</b>	68 - 90
		<b>Total Program Credits</b>	120 - 126

<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	Jeffery D. Wilkerson		4/5/2016
Title			
University	Name	Signature	Date
Department Chairperson	Pam McGee		4/7/16
Academic Dean	Dr. Marsha Weber		4-7-16
Chief Academic Officer	Dr. Joseph Bessie		4/12/16
DARS Encoder	Jolene Richardson		2/13/17
Date when equivalencies were verified/encoded in DARS by the receiving MnSCU institution.			