

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

**Lakes Area Technical Institute  
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 Lakes Area Technical Institute (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

- Automotive Technology AAS, 72 credits
- Aviation Maintenance Technology AAS, 92 credits
- ^Building Trades Technology AAS, 72.5 credits
- Computer Information Systems-Programming Specialist AAS, 74 credits
- Computer Information Systems-Network Specialist AAS, 77 credits
- Computer Information Systems-CISCO Specialist AAS, 76 credits
- Computer Information Systems-Visual Communications Specialist AAS, 74 credits
- Computer Information Systems-Security Specialist AAS, 76 credits
- Diesel Technology AAS, 72.5 credits
- Electronic Systems Technology AAS, 72.5 credits
- Energy Operations AAS, 75.5 credits
- Energy Technology AAS, 77.5 credits
- Environmental Technology AAS, 74 credits
- Precision Machining AAS, 72 credits
- Robotics AAS, 72.5 credits
- Surveying/Mechanical CAD AAS, 72.5 credits
- Welding Technology AAS, 72 credits

(hereinafter sending programs), 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 60+ credits from the sending program. A total of 68 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 uSelect 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 06/01/2013 and shall remain in effect until the end date of 06/01/2018 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 12/01/2017 (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	Lakes Area Technical Institute	Minnesota State University Moorhead
Program name/ Award Type (e.g., AS)/ CIP code (8-digit)	Automotive Technology AAS, 72 credits, 47.0604 Aviation Maintenance Technology AAS, 92 credits, 47.0608 Building Trades Technology AAS, 72.5 credits, 46.0415 Computer Information Systems-Programming Specialist AAS, 74 credits, 11.0701 Computer Information Systems-Network Specialist AAS, 77 credits, 11.0701 Computer Information Systems-CISCO Specialist AAS, 76 credits, 11.0701 Computer Information Systems-Visual Communications Specialist AAS, 74 credits, 11.0701 Computer Information Systems-Security Specialist AAS, 76 credits, 11.0701 Diesel Technology AAS, 72.5 credits, 47.00605 Electronic Systems Technology AAS, 72.5 credits, 15.0303 Energy Operations AAS, 75.5 credits, 15.0613 Energy Technology AAS, 77.5 credits, 15.1001 Environmental Technology AAS, 74 credits, 03.0104 Precision Machining AAS, 72 credits, 48.0501 Robotics AAS, 72.5 credits, 15.0405 Surveying/Mechanical CAD AAS, 72.5 credits, 15.1301 Welding Technology AAS, 72 credits, 48.0508	Operations Management, BS, 120 credits, 52.020500
Aware Type (e.g., AS)	AAS	BS



Credit Length	72-92	120
CIP code (6-digit)	See list above.	52.020500
Describe program admission requirements (if any)		AAS, AS, or Diploma 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)			MSUM 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 AS, AAS, or Diploma program.)	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 Requirement*	1-10	12+	MNTC General Education courses	1-10	12+	Equiv Or Sub
<b>MnTC/General Education Total</b>		<b>12+</b>				

**Special Notes, if any:**\*Students should work with their advisor at LATI and also MSU Moorhead to choose best general education courses to take at LATI. Not all general education courses from LATI transfer to MSUM as part of their general education curriculum. Courses with a more applied focus may not transfer.

**\*\* If students takes equivalencies of these courses at Lakes Area Technical Institute, fewer MNTC credits will be required in MSU – Moorhead's program:**

CHEM 106/106L – Inorganic Chemistry is equivalent to MSUM CHEM 110 and 110L Fundamentals of Chemistry (Goal 3)

ECON 201 - Principles of Microeconomics is equivalent to MSUM ECON 202 Principles of Economics I: Micro (Goal 5)

MATH 102 - College Algebra is equivalent to MSUM MATH 127 College Algebra (Goal 4)

### 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,

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



sociobiology, etc. which students can select).				
Major, Emphasis, Restricted, Unrestricted Electives or Other Courses				
Technical credits as prescribed in program				
Automotive Technology AAS, (56 cr)				
Aviation Maintenance Technology AAS, (72.5 cr)				
Building Trades Technology AAS, (57 cr)				
Computer Information Systems-Programming Specialist AAS, (58 cr)				
Computer Information Systems-Network Specialist AAS, (61 cr)				
Computer Information Systems-CISCO Specialist AAS, (60 cr)				
Computer Information Systems-Visual Communications Specialist AAS, (58 cr)				
Computer Information Systems-Security Specialist AAS, (60 cr)		Technical Credits as prescribed in the program	30	
Diesel Technology AAS, (56.5 cr)		Additional credits up to 18 will be applied as unrestricted elective credits	Up to 18	
Electronic Systems Technology AAS, (59 cr)				
Energy Operations AAS, (57 cr)				
Energy Technology AAS, (60 cr)				
Environmental Technology AAS, (54.5 cr)				
Precision Machining AAS, (56 cr)				
Robotics AAS, (56.5 cr)				
Surveying/Mechanical CAD AAS, (56.5 cr)				
Welding Technology AAS				
Second Year Option (54 cr)				
Marketing, Management, Sales Option (54 cr)				
AED, CSC, CSS, CIS, and HAZ Courses	varies	Not applicable	0	
<b>Major, Emphasis, Unrestricted Electives Total</b>	54 - 72.5	<b>Total College Credits Applied (sum of sections A and B)</b>	60+	
<b>Special Notes, if any:</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
	ACCT 230 Principles of Accounting I (3)	3
	ENGL 387 Technical Report Writing (4)	4
	MGMT 360 Principles of Management (3)	3
	TECH 380 Methods Improvement (3)	3
	TECH 383 Cost Analysis (3)	3
	TECH 385 Process Leadership (3)	3
	TECH 394 Computer Applications for Technologists (4)	4
	TECH 428 Project Management (3)	3
	**TECH 469 Internship (3-12)	3
	TECH 482 Quality Planning and Implementation (3)	3
	TECH 485 Production and Inventory Management (3)	3
	TECH 493 Occupational Safety and Health (3)	3
	*MNTC remaining in Gen Ed goal areas and credits	30 +
	<b>Total Remaining University Credits</b>	<b>Up to 68</b>

#### Special Notes, if any:

\*The General Education courses listed below are required for the Operations Management BS degree. Equivalent



**courses can be taken at Lakes Area Technical Institute (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)


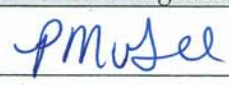
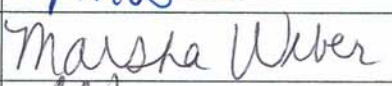
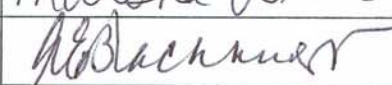
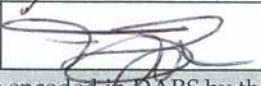
**\*\*Other suitable course exceptions to be handled by the OM faculty after enrollment**

Number of credits in TECH 469 will be based upon how many credits a student needs to obtain the required 40 upper-division credits to receive the degree.

### SECTION D - Summary of Total Program Credits

College (sending) Credits		University (receiving) Requirements	
MnTC/General Education	12+		
Major, Emphasis, Unrestricted Electives or Other	54 - 72.5		
<b>Total College Credits</b>	<b>72 - 92</b>	<b>Total College Credits Applied</b>	<b>60+</b>
		<b>Remaining credit to be taken at the university (receiving institution)</b>	<b>Up to 68</b>
		<b>Total Program Credits</b>	<b>128</b>
<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	Michael D Cartney Vice President		20 May 2013
Title			
University	Name	Signature	Date
Department Chairperson	Pam McGee		5-23-13
Academic Dean	Dr. Marsha Weber		5-28-13
Chief Academic Officer	Dr. Anne Blackhurst		5/29/13
DARS Encoder	Tara Spletstoser		6/6/13
Date when equivalencies were encoded in DARS by the receiving MnSCU institution.			