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):

Heating, Ventilation, Air Conditioning & Refrig AAS

and the receiving institution has established an **Operations Management: Emphasis in Construction Technology, 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 **63 credits** from the sending program. A total of **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 **03/30/2021** and shall remain in effect until the end date of **03/30/2026** 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 **09/30/2025** (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	Minneapolis Community & Technical College	Minnesota State University Moorhead
Program name	Heating, Ventilation, Air Conditioning & Refrigeration	Operations Management: Emphasis in Construction Technology
Award Type (e.g., AS)	AAS	BS
Credit Length	72	120
CIP code (6-digit)	47.020100	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	Goal(s) [1]	Credits	course prefix, number and name	Goal(s)[1]	Credits Applied	Equiv Sub Wav
Minnesota Transfer Curriculum-General Education						
General Education Goal Area Electives	1 – 10	15	Goal Areas 1 – 10 courses	1 – 10	15	
**Recommended: MATH 1110 College Algebra*	*(4)*	*(4)*	*MATH 127 College Algebra*	*(4)*	*(4)*	*Equiv*
ECON 2200 Principles of Microeconomics	*(3)*	*(5, 8)*	*ECON 202 Principles of Econ I: Micro*	*(5, 8)*	*(3)*	*Equiv*
MnTC/General Education Total		15				

Special Notes: * These courses are recommended because they fulfill specific requirements of the major at MSUM. 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.

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

ENGL 1110 College Engl I (3 cr) is equivalent to MSUM ENGL 101 English Composition I, Goal Area 1B.
MATH 1150 Statistical Analysis (4 cr) is equivalent to MSUM MATH 234 Intro to Probability & Statistics, Goal Area 4.
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

(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 Heating, Ventilation, Air Conditioning & Refrig AAS, (57 cr)	57	Technical Credits as prescribed in the program Additional credits up to 18 will be applied as unrestricted elective credits*	30 Up to 18	
Major, Emphasis, Unrestricted Electives Total	57	**Total College Credits Applied (sum of sections A and B)**	63	

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
Gen Ed/ LASC goal areas and credits*	24
MATH 234 Intro to Probability & Statistics (Goal 4)	3
OM 380 Methods Improvement (Writing Intensive)	3
OM 393 Occupational Safety & Health **OR** CM 365 Construction Safety	3
OM 395 Computer Applications for Technologists	3
OM 469 Internship **OR** CM 469 Internship	3
ACCT 230 Principles of Accounting I	3
CM 230 Estimating I: Quantity Survey	3
CM 370 Construction Documents & Specifications	3
CM 335 Estimating II: Pricing & Productivity	3
CM 340 Planning & Scheduling**	3
CM 434 Construction Cost Analysis	3
CM 445 Contractor Quality Management	3
CM 460 Project Administration	3
***ECON 202 Principles of Economics I: Micro (Goal 5)*	*(3)*
***MATH 127 College Algebra (Goal 4)*	*(3)*
Total Remaining University Credits[2]	63

Special Notes: * Goal areas must be met and 42 total MnTC/LASC credits earned. It is recommended that some LASC courses be taken at the upper division to help fulfill the 40 credit upper division requirement. Also one of those classes should be writing intensive.

SECTION D - Summary of Total Program Credits

College (sending) Credits		University (receiving) Requirements	
MnTC/General Education	15		
Major, Emphasis, Unrestricted Electives or Other	57		
Total College Credits	72	**Total College Credits Applied**	63
		Remaining credit to be taken at the university (receiving institution)	63
		Total Program Credits	126

Special Notes, if any:

[2] 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
Vice President of Academic Affairs	Gail O'Kane	Gail O'Kane	3/23/2021
University	Name	Signature	Date
Department Chairperson	Pam McGee		3/23/21
Academic Dean	Josh Behl		3/24/21
Chief Academic Officer	Arrick Jackson		03/24/21
DARS Encoder	Jolene Richardson	Jolene Richardson	04/29/21
Date when equivalencies were verified/encoded in DARS by the receiving MnSCU institution.			