

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

**MINNESOTA STATE 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 STATE 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 an ASSOCIATE OF ARTS – LIBERAL ARTS AND SCIENCES (hereinafter sending program), and the receiving institution has established a BACHELOR OF SCIENCE IN MATHEMATICS: ACTUARIAL SCIENCE (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 60 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 10/01/2019 and shall remain in effect until the end date of 10/01/2024 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 04/01/2024 (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	Minnesota State Community and Technical College	Minnesota State University Moorhead
Program name	Liberal Arts and Sciences	Mathematics: Actuarial Science
Award Type (e.g., AS)	AA	BS
Credit Length	60	120
CIP code (6-digit)	24.010100	521304
Describe program admission requirements (if any)		

### 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						
ENGL 1101 College Writing I	1	3	ENGL 101 English composition I	1B	3	Equiv
<i>*Recommended: COMM 1120 Introduction to Public Speaking</i>	1	3	<i>COMM 100 Speech Communication</i>	1A	3	Equiv
ENGL 1205 Writing About Lit, ENGL 1210 Writing about Current Issues, or ENGL 1215 Professional & Technical Writing	1	3	Goal Area 1	1	3	
Goal Area 2: Critical Thinking (6 cr from two different disciplines)	2		Goal Area 2	2		
Goal Area 3: Natural Sciences (6 cr with at least one lab course)	3		Goal Area 3	3		
Goal Area 4: Mathematics (3 cr) **Recommended: MATH 1115 Functions/ Trig (4) OR MATH 1116 College Trig (3) OR MATH 1118 Precalculus (5)	2, 4	3 - 5	MATH 143 Trigonometry MATH 143 Trigonometry MATH 142 Pre-Calculus	4		
Goal Area 5: History and Social and Behavioral Sciences (9 cr from two different disciplines)	5		Goal Area 5	5		

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

**Recommended: ECON 2210 Macroeconomics AND ECON 2222 Microeconomics	2, 5 2, 5, 9	(3) (3)	ECON 202 Princ of Econ II: Macroeconomics ECON 202 Princ of Econ I: Microeconomics	2, 5 2, 5, 9	(3) (3)	Equiv Equiv
Goal Area 6: Humanities and Fine Arts (9cr from three disciplines)	6		Goal Area 6	6		
Goal Area 7: Human Diversity (3 cr)	7		Goal Area 7	7		
Goal Area 8: Global Perspective (3 cr)	8		Goal Area 8	8		
Goal Area 9: Ethical & Civic Responsibility (3 cr)	9		Goal Area 9	9		
Goal Area 10: People & the Environment (3 cr)	10		Goal Area 10	10		
Double-counted courses may be used to fulfill the requirements of each goal area to which they are assigned.						
<b>MnTC/General Education Total:</b>		40				

**Special Notes, if any:** A student who completes the MnTC requirements at M-State is considered to have completed the general ed/ LASC requirements at MSUM. \*Course is recommended because it fulfills a requirement for the major at MSUM. \*\* Major requires Calculus I, II and III. Student should take the highest level math they are ready for to fulfill this goal.

### 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				
ACCT 2211 Financial Acct I <b>AND</b> ACCT 2212 Financial Acct II	6		ACCT 230 Principles of Accounting I	6 Equiv
<b>*Recommended:</b> MATH 1134 Calculus I (5) <b>AND</b> MATH 1135 Calculus II (5) <b>AND</b> MATH 2231 Calculus III (4)	14		MATH 261 Calculus I MATH 262 Calculus II <b>**MATH 323 Multi-Variable &amp; Vector Calculus</b>	14 Equiv
<b>Major, Emphasis, Unrestricted Electives Total</b>	20		<b>Total College Credits Applied (sum of sections A and B)</b>	60

**Special Notes, if any:** \* These courses are recommended because they are required for the major at MSUM. If students aren't prepared to take calculus, they should take prerequisite courses to prepare. \*\*Course doesn't apply toward the upper division credit requirement.


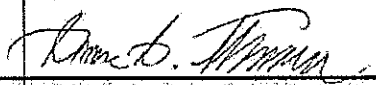
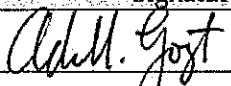
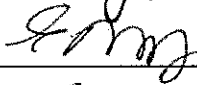


### SECTION C - Remaining University (receiving) Requirements

course prefix, number and name	Credits
MATH 260 Computer Calculus	1
MATH 311 Intro to Proof & Abstract Mathematics	3
MATH 327 Intro to Linear Algebra	3
MATH 335 Intermediate probability & Statistics I	4
MATH 291 LaTeX	1
MATH 321 Financial Mathematics	3
MATH 336 Intermediate Probability & Statistics II	3
MATH 435 Mathematical Statistics I	4
MATH 436 Mathematical Statistics II	3
MATH 491 Mathematical Writing	3
MATH 361 Intermediate Analysis I <b>OR</b> MATH 450 Numerical Analysis I	4
ACCT 231 Principles of Accounting II	3
CSIS 152 Intr to Computers & Programming I-a	3
FINC 340 Financial Management	3
FINC 360 Principles of Investment	3
General Electives	16
<b>*MATH 261 Calculus I (4)</b> <b>*MATH 262 Calculus II (4)</b> <b>*MATH 323 Multi-Variable &amp; Vector Calculus (4)</b> <b>*ECON 202 Microeconomics (3)</b>	<b>(18)</b>

	*ECON 204 Macroeconomics (3)	
	<b>Total Remaining University Credits<sup>2</sup></b>	60
<b>Special Notes:</b> *These are required courses at MSUM, if their equivalent wasn't taken at M-State.		

<b>SECTION D - Summary of Total Program Credits</b>			
<b>College (sending) Credits</b>		<b>University (receiving) Requirements</b>	
MnTC/General Education	40		
Major, Emphasis, Unrestricted Electives or Other	20		
<b>Total College Credits</b>	<b>60</b>	<b>Total College Credits Applied</b>	<b>60</b>
		<b>Remaining credit to be taken at the university (receiving institution)</b>	<b>60</b>
		<b>Total Program Credits</b>	<b>120</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
President	Carrie Brimhall		10/2/19
Associate Dean of Liberal Arts and Sciences	Anne A. Thurmer		10/2/19
University	Name	Signature	Date
Department Chairperson	Adam Goyt		10-7-19
Academic Dean	Lisa Nawrot		10/7/19
Chief Academic Officer	Arrick Jackson		10/15/19
DARS Encoder	Jolene Richardson		11/8/19
Date when equivalencies were verified/encoded in DARS by the receiving MnSCU institution:			