

MINNESOTA STATE COLLEGES AND UNIVERSITIES* ARTICULATION AGREEMENT BETWEEN	MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE AND NORTH DAKOTA STATE UNIVERSITY
<p>*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.</p>	

This Agreement is entered into between MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE, 1414 College Way, Fergus Falls, MN, 56537, (hereinafter sending institution), NORTH DAKOTA STATE UNIVERSITY, 1340 Administration Ave, Fargo, ND, 58105, (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 SCIENCE (A.S.) IN ENGINEERING (hereinafter sending program), and the receiving institution has established a **BS in AGRICULTURAL AND BIOSYSTEMS ENGINEERING, BS in CIVIL ENGINEERING, BS in CONSTRUCTION ENGINEERING, BS in INDUSTRIAL ENGINEERING AND MANAGEMENT, BS in MANUFACTURING ENGINEERING, BS in ELECTRICAL ENGINEERING, BS in COMPUTER ENGINEERING, BS in MECHANICAL ENGINEERING** (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 60 credits from the sending program. A total of 72-84 credits (varying by discipline) 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 "Transfer Evaluation System (TES) or College Source Transfer Module" 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 10/01/18 and shall remain in effect until the end date of 10/01/23 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 04/01/22 (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

Check if the sending program ___ or receiving program ___ is new.

	College (sending)	University (receiving)
Institution	MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE	NORTH DAKOTA STATE UNIVERSITY
Program name	ENGINEERING	ENGINEERING
Award Type (e.g., AS)	AS in ENGINEERING	BS in AGRICULTURAL AND BIOSYSTEMS ENGINEERING, BS in CIVIL ENGINEERING, BS in CONSTRUCTION ENGINEERING, BS in INDUSTRIAL ENGINEERING AND MANAGEMENT BS in MANUFACTURING ENGINEERING, BS in ELECTRICAL ENGINEERING, BS in COMPUTER ENGINEERING, and a BS in MECHANICAL ENGINEERING
Credit Length	60	127-133 (varies by discipline)
CIP code (6-digit)	14.0101	
Describe program admission requirements (if any)	None	Minnesota State Community and Technical College students should check with individual NDSU Departments for transfer GPA and grade requirements. A grade of "C" or higher is required for many courses, including transfer work. Upon transfer, program-specific coursework (typically taken in the first two years at NDSU) will need to be completed as part of department requirements. <u>Completion of AS requirements does not waive any NDSU curriculum requirements.</u> NOTE: Electrical and Computer Engineering requires a minimum transfer GPA of 2.3 while Mechanical Engineering requires a minimum transfer GPA of 2.8. Students who do not meet the minimum GPA at the time of transfer will be designated as "General Engineering" until requirements are met.

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						
CHEM 1111 – Gen Inorganic Chem I	3	5	CHEM 121/L – General Chemistry I		4	Equiv
CHEM 1112 – Gen inorganic Chem II	3	5	CHEM 122/L – General Chemistry II		4	Equiv
COMM 1120 – Intro to Public Speaking	1	3	COMM 110 – Fund of Public Speaking		3	Equiv
ENGL 1101 – College Writing I	1	3	ENGL 110 – College Comp I		4	Equiv
ENGL 1205 – Writing about Lit, or ENGL 1210 – Writing about Current Issues, or ENGL 1215 – Professional and Technical Writing	1	3	ENGL 120 – College Comp II		3	Equiv
MATH 1134 – Calculus I	2&4	5	MATH 165 – Calculus I		4	Equiv
MATH 1135 – Calculus II	2&4	5	MATH 166 – Calculus II		4	Equiv
MATH 2231 – Calculus III	4	4	MATH 265 – Calculus III		4	Equiv
MATH 2259 – Differential Equations	N/A	4	MATH 266 – Intro/Differential Equations		3	Equiv
PHYS 1412 – University Physics II	3	5	PHYS 252/L – University Physics II		5	Equiv
MnTC electives (need two goal areas other than 1, 2, 3, 4)		5-9	Additional general education credits		13	Sub
						51
MnTC/General Education Total		47-51				

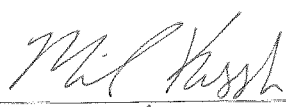









Special Notes, if any:

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				
ENGR 2210 – Engineering Mechanics I	3	ME 221 – Engineering Mechanics I	3	Equiv
ENGR 2220 – Engineering Mechanics II	3	ME 222 – Engineering Mechanics II	3	Equiv
ENGR 2230 – Mechanics of Materials	3	ME 223 – Mechanics of Materials	3	Equiv
Elective: CADD 1000 – AutoCAD Basics	3	Elective: CE 212 and CME 212	3	Sub
Restricted elective credits - list courses (if none enter 0)	0			
Unrestricted elective credits (if none enter 0)	0	College's unrestricted elective credits accepted in transfer (if none enter 0)	0	
Major, Emphasis, Unrestricted Electives Total	9-12	Total College Credits Applied (sum of sections A and B)	60	

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

Faculty	Name	Signature	Date
NDSU College of Engineering, Dean	Dr. Michael Kessler		10/3/18
NDSU Agricultural & Biosystems Engineering	Dr. Sreekala Bajwa		10/9/18
NDSU Civil Engineering	Dr. David Steward		10/3/2018
NDSU Construction Engineering	Dr. Jerry Gao		10/3/2018
NDSU Electrical & Computer Engineering	Dr. Benjamin Braaten		10/3/18
NDSU Industrial & Manufacturing Engineering	Dr. David Grewell		10/5/18
NDSU Mechanical Engineering	Dr. Alan Kallmeyer		10/4/18
College	Name	Signature	Date
MState President	Dr. Carrie Brimhall		10/1/18
University	Name	Signature	Date
NDSU Provost/Vice President for Academic Affairs	Dr. Ken Grafton Interim		10/14/18
NDSU President	Dr. Dean Bresciani		10-9-18
DARS Encoder			

Date when equivalencies were verified/encoded in DARS by the receiving MnSCU institution.



Fall - 1st Year		Spring - 1st Year	
MSCTC Course	cr	MSCTC Course	cr
ENGL 1101 – College Writing I	3	ENGL 1205 – Writ About Literature or ENGL 1210 – Writing Current Issues or ENGL 1215 – Prof and Tech Writing	3
MATH 1134 – Calculus I	5	MATH 1135 – Calculus II	5
CHEM 1111 – General Inorganic Chem I	5	*CHEM 1112 – General Inorganic Chem II	5
Gen Ed Elective	3	ENGR 2210 – Engineer Mechanics I	3
16 credits		16 Credits	
Fall - 2nd Year		Spring - 2nd Year	
MATH 2231 – Calculus III	4	MATH 2259 – Differential Equations	4
ENGR 2220 – Engineer Mech II	3	PHYS 1412 – University Physics II	5
COMM 1120 – Intro to Public Speak	3	ENGR 2230 – Mechanics of Materials	3
Gen Ed or Engineering Elective	3	Gen Ed or Engineering Elective	3
13 credits		15 credits	
GEN ED Electives	Title	MTC-Area	cr
ANTH 1100 ■ • ◇	Anthropology	5 & 8	3
ECON 2222 • ◇	Microeconomics	5 & 9	3
GEOG 1110 • ◇	World Geography	5 & 8	3
HUM 1105 △	Religion in the Humanities	6 & 8	3
HUM 2230 ■ ◇	World Cinema	6 & 8	3
MUSC 1116 ■ ◇	The World of Music	6 & 8	3
SOC 1111 ■ ◇	Intro to Sociology	5 & 7	3
SOC 2216 ■ ◇	Minority Group Relations	5 & 7	3
WMST 1130 ■ ◇	Women's Studies	5 & 7	3
* Other transfer General Education courses are available. Please consult with MState Advisor.			
ENGINEER Elective	Title	NDSU Equivalent	
CADD 1000	AutoCAD Basics	CE 212 and CME 212 (3 cr)	

Minnesota Transfer Curriculum Requirements

- ENGL 1101 - Area 1
- MATH 1134 - Area 2
- CHEM 1111 - Area 3
- MATH 1134 - Area 4

- Students pursuing a Computer or Electrical Engineering Degree may substitute PHYS 1411 – University Physics I for CHEM 1112

- Students pursuing a Civil Engineering Degree will need to take ENGR 311 or ENGR 312 once they transfer to NDSU

- A student who has completed an associate of arts or an associate of science degree in the United States or Canada at a regionally accredited institution and who transfers to NDSU or who pursues a second baccalaureate degree at NDSU is considered to have completed his or her lower-division general education requirements at NDSU.

Transfer student coursework from outside the United States and Canada will be evaluated on a course-by-course basis.

NDSU Requirements

- - Cultural Diversity
- - Global Perspective
- ◇ - Social Science
- △ - Humanities