

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

**MINNESOTA STATE COMMUNITY AND
TECHNICAL COLLEGE
AND
NORTH DAKOTA STATE UNIVERSITY**

*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 **NORTH DAKOTA STATE UNIVERSITY** (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, and a 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.

Transfer of Credits

- A. The receiving institution will accept 60 credits from the sending program. A total of 75-80 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 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 1/15/2012 and shall remain in effect until the end date of 1/14/2017 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 6/01/16 (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.

July 6, 2011

PROGRAM ARTICULATION TABLE

	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	135 – 140 (varies by discipline)
CIP code (6-digit)	14.010100	
Describe program admission requirements (if any)	None	MSCTC 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. Completion of AS requirements does not waive any NDSU curriculum requirements. 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/Way 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	Equip Sub Wav
Minnesota Transfer Curriculum-General Education						
Chem 1111 – Gen Inorganic Chem I	3	5	Chem 121/L – General Chemistry I		4	Equip
Chem 1112 – Gen Inorganic Chem II	3	5	Chem 122/L – General Chemistry II		4	Equip
Comm 1120 - Intro to Public Speaking	1	3	Comm 110 - Fund of Pubic Speaking		3	Equip
Engl 1101 College Writing I	1	3	Engl 110 - College Comp I		3	Equip
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	Equip
Math 1134 – Calculus I	2&4	5	Math 165 - Calculus I		4	Equip
Math 1135 - Calculus II	2&4	5	Math 166 - Calculus II		4	Equip
Math 2231 - Calculus III	4	4	Math 265 – Calculus III		4	Equip
Math 2259 Differential Equations	NA	4	Math 266 – Intro/Differential Equations		3	Equip
Phys 1412 University Physics II	3	5	Phys 252/L – University Physics II		5	Equip
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 – Engineer Mechanics I		3	ME 221 – Engineering Mechanics I		3	Equip
Engr 2220 - Mechanics II		3	ME 222- Engineering Mechanics II		3	Equip
Engr 2230 – Mechanics of Materials		3	ME 223 – Mechanics of Materials		3	Equip
Elective: CADD 1102 Fundamentals of CADD		4	Elective: CE 212 and CME 212		3	Sub
Restricted elective credits - list courses (if none enter 0)						
Unrestricted elective credits (if none enter 0)			College's unrestricted elective credits accepted in transfer (if none enter 0)			
Major, Emphasis, Unrestricted Electives Total		9-13	Total College Credits Applied (sum of sections A and B)		9-12	

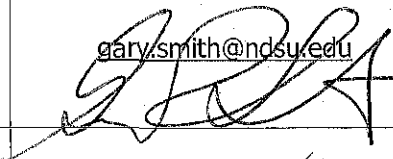
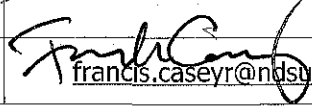
SECTION C - Remaining University (receiving) Requirements

course prefix, number and name	Credits
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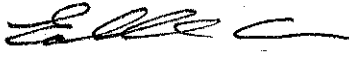
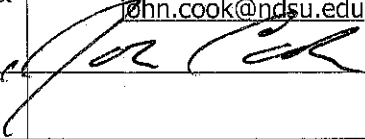

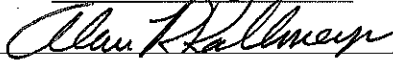
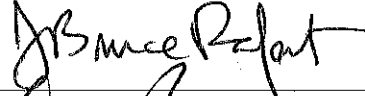

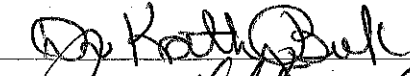
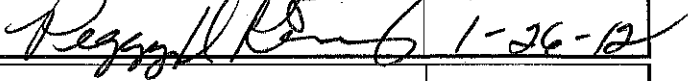
¹ MnTC goal areas transfer to the receiving college/university according to the goal areas designated by the sending college/university

	Per North Dakota State University's curriculum guide (attached)	
	University unrestricted elective credits not counted elsewhere (if none enter 0)	
	Total Remaining University Credits	75-80
Special Notes, if any:		

SECTION D - Summary of Total Program Credits			
College (sending) Credits		University (receiving) Requirements	
MnTC/General Education	47-51		
Major, Emphasis, Unrestricted Electives or Other	9-13		
Total College Credits	60	Total College Credits Applied	60
		Remaining credit to be taken at the university (receiving institution)	75-80
		Total Program Credits	135-140
<p>Special Notes, if any: Course equivalencies will be granted for course prefix or number changes that do not change course competencies. NDSU's lower division general education requirements will be waived for students who complete the MnTC (Minnesota Transfer Curriculum requirements). MState transfer students will still need to take an upper-division writing course to satisfy NDSU's general education requirements. Civil engineering requires that transfer students take either Engr 311 or Engr 312 as part of their gen eds to meet accreditation requirements.</p>			

Authorization by each college and university.			
<p>These parties have caused this Agreement to be duly executed and agree to be bound thereby <i>(Insert additional rows as needed)</i></p>			
Faculty Contact Person	Name	Email	Phone
University	Dr. Gary Smith, Dean - College of Engineering & Architecture, and Department Chair - Construction Engineering	 gary.smith@ndsu.edu	701-231-7525
	Francis Casey, Department Chair - Agricultural & Bio	 francis.caseyr@ndsu.edu	701-231-7265

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	systems Engineering		
	Dr. Eakalak Khan, Department Chair – Civil Engineering	eakalak.khan@ndsu.edu	701-231-7717
			
	Dr. John Cook, Department Chair- Industrial Engineering & Management, and Manufacturing Engineering	john.cook@ndsu.edu	701-231-5694
			
	Dr. Rajendra Katti, Department Chair – Electrical Engineering, and Computer Engineering	rajendra.katti@ndsu.edu	701- 231-8068
			
	Dr. Alan Kallmeyer, Department Chair – Mechanical Engineering	alan.kallmeyer@ndsu.edu	701-231-8835
			
College	Dan Willoughby, Faculty – Math Dept.	daniel.willoughby@minnesota.edu	218-299-6815
University Authorization			
	Name	Signature	Date
Provost/Vice President for Academic Affairs	Dr. J. Bruce Rafert		4/18/12
President	Dr. Dean Bresciani		1-2012
College Authorization			
	Name	Signature	Date
Chief Academic Officer	Dr. Kathy Brock		1/23/12
President	Dr. Peggy Kennedy		1-26-12
DARS Encoder			
Date when equivalencies were encoded in DARS by the receiving MnSCU institution.			