

MINNESOTA STATE COLLEGES AND  
UNIVERSITIES\*  
TRANSFER AGREEMENT  
BETWEEN

Alexandria Technical & Community College  
AND  
Bemidji 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 Alexandria Technical & Community College 1601 Jefferson Street, Alexandria, MN 56308 (hereinafter sending institution), and Bemidji State University 1500 Birchmont Drive NE, Bemidji, MN 56601-2699 (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 a Mechatronics AAS (hereinafter sending program), and the receiving institution has established a Engineering Technology B.S. (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 72 credits from the sending program. A total of 67 credits remain to complete the receiving program.
- B. Courses will transfer as described in the attached Program Transfer 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 Transfer Agreement is effective on 10/16/2023 and shall remain in effect until 10/15/2028 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 Transfer Agreement will be reviewed by both parties beginning 4/15/2028 (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 TRANSFER TABLE

**Check if the sending program \_\_\_ or receiving program \_\_\_ is new.**

	College (sending)	University (receiving)
Institution	Alexandria Technical & Community College	Bemidji State University
Program name	Mechatronics	Engineering Technology
Award Type (e.g., AS)	AAS	B.S.
Credit Length	72	120
CIP code (6-digit)	15.0406	15.0612
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						
COMM 1415 Public Speaking	1	3	Comm 1100 Public Speaking	1	3	Equiv
ENGL1460 Technical Writing	1	3	ENGL 2150 Technical Writing	1	3	Equiv
MATH1460 Quantitative Problem Solving	4	3	MNTC Equivalent credits and Goal Area	4	3	Equiv
MN Transfer Curriculum Elective	1-10	6	MNTC Equivalent credits and Goal Area	1-10	6	Equiv
<b>MnTC/General Education Total</b>		15				

**Special Notes, if any:** Remaining MnTC requirements may be completed at the college or university.

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

## 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				
FLPO 1525 Pneumatic Componentry	2	General Elective Credits	2	
FLPO 1526 Pneumatic Componentry Lab	1	General Elective Credits	1	
FLPO 2520 Instrumentation and MFGT 1550 Engineering Drafting	5	TADT 2461 Parametric 3D Modeling and General Elective Credits (2 cr.)	5	Equiv
MFGT 2555 Electrical Design for Mechatronics Systems and MFGT 2564 Manufacturing Automation Lab	4	TADT 1460 2D Graphics and Laser Etching and General Elective Credits (1 cr)	4	Equiv
MFGT 1560 Mechatronics I	3	TADT 2465 Engineering Technology Project II	3	Equiv
FLPO 1501 Fluid Power Fundamentals	2	General Elective Credits	2	
FLPO 1503 Fluid Power Fundamentals Lab	1	Required Foundation Core (1 Cr)	1	Sub
FLPO 2527 Pneumatic Circuits & Logic Lab FLPO 2528 Pneumatic Circuits & Logic	3	TADT 3250 Print Reading and Project Doc.	3	Equiv
MFGT 1520 Applied Mechanical Components	3	TADT 1464 Engineering Technology Project I	3	Equiv
MFGT 2545 Mechatronics II	3	General Elective Credits	3	
MFGT 2546 Mechatronics II Lab	3	General Elective Credits	3	
FLPO 1529 Hydraulic Components	4	General Elective Credits	4	
FLPO 1531 Hydraulic Components Lab	3	General Elective Credits	3	
MFGT 2502 Industrial Distribution	2	TADT 3970 Internship	2	Equiv
MFGT 2550 Programmable Logic Controls	3	TADT 3277 Programmable Logic Controllers	3	Equiv
MFGT 2551 Programmable Logic Controls Lab	3	General Elective Credits	3	
FLPO 2516 Advanced Circuit Design Lab	3	General Elective Credits	3	
FLPO 2540 Mobile Hydraulics	3	General Elective Credits	3	
MFGT 2501 Sustainable Manufacturing	3	TADT 2217 Strength of Materials	3	Equiv
MFGT 2560 Manufacturing Automation	3	TADT 2100 Impact of Technology, Art & Design and General Elective Credits 1 cr.)	3	Equiv
<b>Major, Emphasis, Unrestricted Electives Total</b>	57	<b>Total College Credits Applied (sum of sections A and B)</b>	72	

Special Notes:

## SECTION C - Remaining University (receiving) Requirements

	course prefix, number and name	Credits
	Credits to complete MNTC and general education graduation requirement	14
	<b>TADT Common Core</b>	
	TADT 1111 Introduction to Project Management	3
	TADT 3267 Economic and Cost Analysis	3
	TADT 4873 Emphasis Related Capstone	3
	TADT 4878 Quality Assurance	3
	TADT 4970 Internship	1
	<b>Engineering Technology Core Courses</b>	
	MATH 1470 Precalculus	5
	PHYS 1101 General Physics I	4
	PHYS 1102 General Physics II	4
	TADT 1210 Introduction to Manufacturing Processes I	3
	TADT 1220 Introduction to Manufacturing Processes II	3
	TADT 2877 Engineering Problem Solving	3

	TADT 3217 Materials Science and Metallurgy	3
	TADT 3462 Computer Controlled Machining	3
	TADT 3537 Industrial Design/Innovation	3
	TADT 4778 Advanced Topics in Technology	3
	TADT 4385 Sustainability and Emerging Technologies	3
	<b>REQUIRED FOUNDATION COURSES</b> <b>Choose 3 credits from the list below</b>	
	TADT 4589 Advanced Prototype Project	3
	TADT 4880 Total Quality Management	3
	<b>Total Remaining University Credits<sup>2</sup></b>	<b>67</b>
<b>Special Notes, if any:</b> Some of the credits to complete MNTC may need to be upper division courses and may need to cover multiple goal areas to meet university graduation requirements.		

<b>SECTION D - Summary of Total Program Credits</b>			
<b>College (sending) Credits</b>		<b>University (receiving) Requirements</b>	
<b>MnTC/General Education</b>	15	57	
<b>Major, Emphasis, Unrestricted Electives or Other</b>	57		
<b>Total College Credits</b>	<b>72</b>	<b>Total College Credits Applied</b>	<b>72</b>
		<b>Remaining credit to be taken at the university (receiving institution)</b>	<b>67</b>
		<b>Total Program Credits</b>	<b>139</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.

<b>College Chief Academic Officer</b>	<b>Name</b>	<b>Signature</b>	<b>Date</b>
Vice President of Academic and Student Affairs	Mr. Scott Berger		
Title			
<b>University Chief Academic Officer</b>	<b>Name</b>	<b>Signature</b>	<b>Date</b>
Provost	Dr. Allen Bedford		
Title			
DARS Encoder	Beverly Hodgson		
Transfer Credit Evaluator	Anna Riedel		
Date when equivalencies were verified/encoded in DARS by the receiving Minnesota State institution.			