

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

**Lake Superior 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 Lake Superior College (hereinafter sending institution), and Bemidji 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 a **Machine Technology CNC Programmer, A.A.S. degree** (hereinafter sending program), and the receiving institution has established an **Applied Engineering, B.A.S. major** (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 69 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 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 09/14/2016 and shall remain in effect until the end date of 09/13/2021 or 05/04/2021 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 03/13/2021 (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.

September 14, 2016

PROGRAM ARTICULATION TABLE

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

	College (sending)	University (receiving)
Institution	Lake Superior College	Bemidji State University
Program name	Machine Technology CNC Programmer	Applied Engineering
Award Type (e.g., AS)	AAS	BAS
Credit Length	71	120
CIP code (6-digit)	48.0510(5588)	15.0000
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) ¹	Credits	course prefix, number and name	Goal(s) ¹	Credits Applied	Equiv Sub Wav
Minnesota Transfer Curriculum-General Education						
General Education Credits from Minnesota Transfer Curriculum Goal Areas (from at least 3 of the 10 goal areas)	1-10	15	General Education Credits from MNTC	1-10	15	Equiv
MnTC/General Education Total		15				

Special Notes, if any: Additional liberal education credits from the Minnesota Transfer Curriculum may be taken at the college and will apply to the liberal education requirements at the university.

¹ 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				
INMG 1400 Intro to Manufacturing Technology	4			
INMG 1410 Mechanical Blueprint Reading	3			
INMG 1420 Design Application Concepts I	3			
INMG 1422 Design Application Concepts II	3			
MTCC 1432 Quality Methods	2			
MTCC 1505 Surface Grinding	2			
MTCC 1600 Engineering Materials	1			
MTCC 1603 Turning	2			
MTCC 1604 Milling	2			
MTCC 1620 CNC Basic Programming	2	Block Transfer from Technology Degree	38	
MTCC 2504 CAD/CAM	3			
WLDG 1560 Gas Metal Arc Welding I	3			
CADE 1468 Solidworks I	3	General Elective Credits	16	
INMG 1412 Advanced Mechanical Blueprint Reading	3			
MTCC 2502 CNC Turning	3			
MTCC 2540 CNC Machine Center 3 Axis	3			
MTCC 2560 Advanced CNC Mill 4 Axis	3			
MTCC 2562 CNC Mill/Turn Live Tooling	3			
MTCC 2564 CNC Horizontal 4 Axis Machining	3			
MTCC 2570 Wire EDM	2			
MTCC 2572 Swiss Automatic	3			
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	56	Total College Credits Applied (sum of sections A and B)	69	

SECTION C - Remaining University (receiving) Requirements

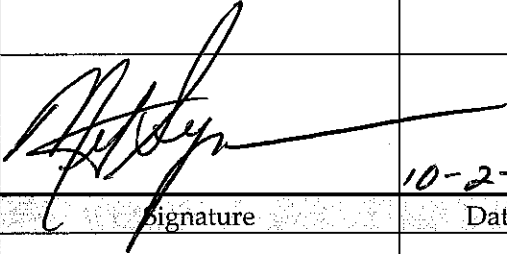
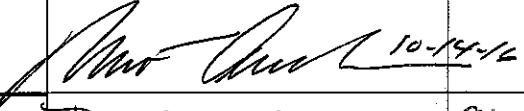
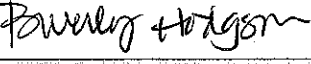
	course prefix, number and name	Credits
	Complete all remaining MnTC / liberal education goal areas	27
	TADT COMMON CORE 15 credits	
	TADT 3111 Project Management Methodology	3
	TADT 3267 Economic and Cost Analysis	3
	TADT 4385 Sustainability and Emerging Technologies	3
	TADT 4873 Emphasis Related Capstone	3
	TADT 4878 Quality Assurance	3
	APPLIED ENGINEERING CORE 21 credits	
	TADT 3100 Principles of Professional Development	3
	TADT 3217 Material Science and Metallurgy	3
	TADT 3537 Industrial Design and Innovation	3
	TADT 3700 Operations Planning and Control	3
	TADT 3887 Safety and Risk Management	3
	TADT 4867 Lean Principles and Practices	3
	TADT 4879 Services Process/Improvement	3
	UPPER DIVISION TADT ELECTIVES	4
	Total Remaining University Credits²	67

Special Notes, if any:

SECTION D - Summary of Total Program Credits

College (sending) Credits		University (receiving) Requirements	
MnTC/General Education	15		
Major, Emphasis, Unrestricted Electives or Other	56		
Total College Credits	71	Total College Credits Applied	69
		Remaining credit to be taken at the university (receiving institution)	67
		Total Program Credits	136
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
Chief Academic Officer			
Vice President of Academic and Student Affairs	Michael Seymour		10-27-16
Title			
University	Name	Signature	Date
Chief Academic Officer			
Provost & Vice President of Academic Affairs	Dr. Michael Anderson		10-14-16
Title			
DARS Encoder	Bev Hodgson		9/13/2016
Date when equivalencies were verified/encoded in DARS by the receiving MnSCU institution.			