

MINNESOTA STATE COLLEGES AND
UNIVERSITIES*
TRANSFER AGREEMENT
BETWEEN

Alexandria Technical and 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 **Machine Tool Technology Diploma** (hereinafter sending program), and the receiving institution has established an **Engineering Technology BS** (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 **79-82** 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 **4/19/2018** and shall remain in effect until the end date of **4/18/2023** 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 **10/18/2022** (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.



April 19, 2018

PROGRAM ARTICULATION TABLE

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

| | College (sending) | University (receiving) |
|--|--|--------------------------|
| Institution | Alexandria Technical and Community College | Bemidji State University |
| Program name | Machine Tool Technology | Engineering Technology |
| Award Type (e.g., AS) | Diploma | BS |
| Credit Length | 72 | 120 |
| CIP code (6-digit) | 48.0501 | 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) ¹ | Credits | course prefix, number and name | Goal(s) ¹ | Credits Applied | Equiv Sub Wav |
| Minnesota Transfer Curriculum-General Education | | | | | | |
| MnTC Elective | 1-10 | 3 | MnTC Equivalent Course | 1-10 | 3 | Equiv |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| MnTC/General Education Total | | 3 | | | | |

Special Notes, if any: Remaining liberal education requirements for a bachelor's degree may be completed at the college or 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 | | | | |
|---|---|---|--|-------|
| MATH1452 Technical Math | 3 | General Elective Credit | 3 | |
| COMM1440 Communicating for Results | 2 | General Elective Credit | 2 | |
| GEN ED 3 General Education Elective (See Note Below) | 3 | General Elective Credit | 3 | |
| MACH1505 Blueprint Reading/Geo Tolerancing I (2 Cr) and MACH1625 Blueprint Reading/Geo Tolerancing II (3 Cr) | 5 | TADT 3250 Print Reading & Project Documentation (3 Cr) and General Elective Credit (2 Cr) | 5 | Equiv |
| MACH1523 Machine Tool Theory I | 2 | General Elective Credit | 2 | |
| MACH1619 Turning I | 3 | General Elective Credit | 3 | |
| MACH1620 Milling I | 3 | General Elective Credit | 3 | |
| MACH1621 Grinding I | 3 | General Elective Credit | 3 | |
| MACH1624 Shop Math I | 2 | General Elective Credit | 2 | |
| MACH1626 Turning II | 3 | TADT 1210 Introduction to Manufacturing Processes I | 3 | Sub |
| MACH1627 Milling II | 3 | TADT 1220 Introduction to Manufacturing Processes II | 3 | Equiv |
| MACH1628 Grinding II | 3 | General Elective Credit | 3 | |
| MACH1629 Machine Tool Theory II | 3 | TADT 2100 Impact Of Technology (2 Cr) | 3 | Sub |
| MACH2510 Computer Numerical Control | 3 | General Elective Credit | 3 | |
| MACH2617 Intro. to CAD and (1 Cr) MACH2612 Jig & Fixture Design (2 Cr) | 3 | TADT 1460 2D Graphics And Laser Etching | 3 | |
| MACH2630 Process Plan. & Applied Metrology | 1 | General Elective Credit | 1 | |
| MACH2631 Machine Tool Operations I | 3 | General Elective Credit | 3 | |
| MACH2634 CNC Machining Operations I | 4 | General Elective Credit | 4 | |
| MFGT1560 Mechatronics I | 3 | TADT 2465 Engineering Technology Project II | 3 | Equiv |
| MACH2524 Computer Aided Manufacturing | 3 | TADT 1464 Engineering Technology Project I | 3 | Equiv |
| MACH2639 Mold Theory | 2 | General Elective Credit | 2 | |
| MACH2641 Mold Building | 5 | General Elective Credit | 5 | |
| MACH2644 CNC Machining Operations II | 4 | TADT 3462 Computer Controlled Machining (3 Cr) General Elective Credit (1 Cr) | 4 | Equiv |
| Restricted elective credits - list courses (if none enter 0) | | | | |
| Unrestricted elective credits (if none enter 0) | | | | |
| Major, Emphasis, Unrestricted Electives Total | | 69 | Total College Credits Applied (sum of sections A and B) | |
| | | | 72 | |

Notes: It is suggested that students take courses from the Minnesota Transfer Curriculum goal areas 1-10 rather other "General Elective Credits". This will reduce MnTC requirements at the university. TADT 3250 and TADT 3462 count towards the 40 upper division credits required for graduation.

SECTION C - Remaining University (receiving) Requirements

| course prefix, number and name | Credits |
|--|---------|
| Liberal Education Credits to complete MnTC | 23-26 |
| TADT Common Core – 18 Credits | |
| TADT 1111 Introduction to Project Management | 3 |
| TADT 3267 Economic and Cost Analysis | 3 |
| TADT 3970 Internship | 1 |
| TADT 4385 Sustainability & Emerging Technologies | 3 |
| TADT 4873 Emphasis Related Capstone | 3 |
| TADT 4878 Quality Assurance | 3 |
| TADT 4970 Internship | 2 |
| Engineering Technology Core- 34 Credits | |
| MATH 1470 Precalculus * | 5 |
| PHYS 1101 General Physics I * | 4 |

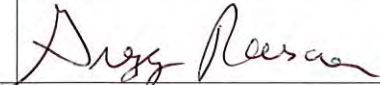

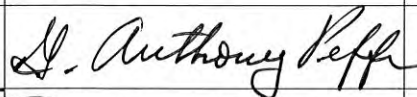
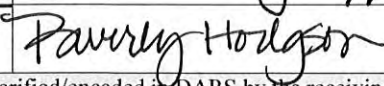
| | | |
|--|---|-------|
| | PHYS 1102 General Physics II * | 4 |
| | TADT 2217 Strength of Materials | 3 |
| | TADT 2461 Parametric 3D Modeling | 3 |
| | TADT 2877 Engineering Problem Solving | 3 |
| | TADT 3217 Materials Science and Metallurgy | 3 |
| | TADT 3277 Programmable Logic Controllers | 3 |
| | TADT 3537 Industrial Design/Innovation | 3 |
| | TADT 4778 Advanced Topics in Technology | 3 |
| | | |
| | Required Foundation Courses, Select 4 Credits | 4 |
| | TADD 3440 3D Design Software (4 Cr) | |
| | TADD 3450 History of Modern Design (4 Cr) | |
| | TADD 3579 Branding and Packaging (4 Cr) | |
| | TADT 4589 Advanced Prototype Project (3 Cr) | |
| | TADT 4880 Total Quality Management (3 Cr) | |
| | | |
| | Total Remaining University Credits² | 79-82 |

PHYS 1101, PHYS 1102 and MATH 1470 count in the program and towards MnTC requirements. It is suggested strongly that students transferring to BSU also take TADT 3111 Applied Project Management.

| SECTION D - Summary of Total Program Credits | | | |
|--|-----------|---|----------------|
| College (sending) Credits | | University (receiving) Requirements | |
| MnTC/General Education | 3 | | |
| Major, Emphasis, Unrestricted Electives or Other | 69 | | |
| Total College Credits | 72 | Total College Credits Applied | 72 |
| | | Remaining credit to be taken at the university (receiving institution) | 79-82 |
| | | Total Program Credits | 154-157 |

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 |
|---|--------------------|--|--------|
| Senior Dean of Academic Affairs and Students | Gregg Raisanen |  | 3/1/19 |
| President | Dr. Laura Urban |  | 3-4-19 |
| University | Name | Signature | Date |
| Chief Academic Officer | | | |
| Provost | Dr. Anthony Peffer |  | 2/2/19 |
| DARS Encoder | Beverly Hodgson |  | 2-1-19 |
| Date when equivalencies were verified/encoded in DARS by the receiving MnSCU institution. | | | |