MINNESOTA STATE COLLEGES AND UNIVERSITIES* ARTICULATION AGREEMENT BETWEEN	Alexandria Technical and Community College AND St. Cloud 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 St Cloud State University (hereinafter receiving institution), and Alexandria Technical and Community College (hereinafter sending 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 Applied Science in General Engineering Technology (hereinafter sending program), and the receiving institution has established a Bachelor of Science in Manufacturing Engineering Technology (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 64 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 08/1/2025 and shall remain in effect until the end date of 7/31/2030 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 02/01/2030.
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		
	College (sending)	**University (receiving)**
Institution	Alexandria Tech & Community College	St. Cloud State University
Program name	General Engineering Technology	Manufacturing Engineering Technology
Award Type (e.g., AS)	AAS	BS
Credit Length	60	120
CIP code (6-digit)	15.0000	15.0613
Describe program admission requirements	This is a closed enrollment program designed for the United States Naval Community College	Students must submit official transcripts from United States Naval Community College (USNCC) and JSTs.
Program Description	Engineering is a profession that uses basic knowledge from the mathematical and natural sciences and utilizes the materials and forces of nature to develop systems that will perform optimally and economically for the benefit of mankind. The General Engineering AS degree program is designed to provide for a student's first two years of a four-year Engineering degree and will meet the needs of those students who have not yet decided on a specific engineering field. Students will develop a fundamental knowledge of physics, chemistry, and mathematics along with the engineering requites necessary to meet lower division requirements for BS Engineering specialties: Civil/Construction, Composite, Electrical, General, Manufacturing, and Mechanical.	The Manufacturing Engineering Technology BS program prepares graduates for the dynamic environment of any manufacturing facility. Common job functions for graduates include production engineer, quality director, director of continuous improvement, design for manufacture analyst, CAD engineer, and more. The program provides a fundamental engineering base, an exposure to shop floor procedures, and then builds on this foundation to develop critical thinking and engineering problem solving skills. Repetitive manufacturing jobs have been declining for a decade. These are being replaced by jobs requiring advanced manufacturing skills. This program addresses this need by providing a more educated workforce for the manufacturing sector. The primary strengths of our program are a heavy focus on the lean manufacturing philosophy, continuous improvement, and composites manufacturing. Several graduates have been offered jobs because of their extensive knowledge of lean manufacturing. Requiring a course in composite materials, which is an emerging material in the industry, is rarely seen.
Program Learning Outcomes	1. Demonstrate proficiency in core principles of mathematics and physics that serve as the groundwork for advanced engineering studies. 2. Evaluate, formulate, and solve applied science problems. 3. Identify the techniques, skills, and modern applied science tools necessary for professional practice.	1. Apply knowledge, techniques, skills, and modern tools of mathematics, science, engineering, and technology to solve broadly defined engineering problems appropriate to the discipline. 2. Design systems, components, or processes meeting specified needs for broadly defined engineering problems appropriate to the discipline. 3. Apply written, oral, and graphical communication in broadly defined technical and non-technical environments and an ability to identify and use appropriate technical literature.

	Apply basic design principles to produce solutions that meet the specified needs of the target users.	4. Conduct standard tests, measurements, and experiments and analyze and interpret the results to improve processes. 5. Function effectively as a member as well as a leader on technical teams. 6. Demonstrate an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity.

SECTION A - Minnesota Transfer Curriculum-General Education

College (sending)			University (receiving)			
course prefix, number and name	Goal(s)	Cr	course prefix, number and name	Goal(s)[1]	Credits Applied	Equiv Sub Wav
ENGL 1410 Composition I	1 & 2	3	ENGL 191 Intro Rhetorical & Analytical Writing	1	6	Equiv
ENGL 1420 Composition II	1 & 2	3				
CHEM 1500 General Chemistry	2 & 3	4	Critical Thinking Elective	2		Equiv
			CHEM 210 General Chemistry I	3	4	Equiv[1]
PHYS 1407 College Physics & PHYS 1408 College Physics Lab	2 & 3 3	4	PHYS 231 General Physics	3	4	Equiv[1]
MATH 1425 Precalculus	4	4	MATH 115 Precalculus	4	4	Equiv[1]
NAV 102 Naval History and *NAV 104 Civil Military Organization and Policy	5	6	History/Social Behavior Elective Global Perspective Elective	5 8	6	Equiv
NAV 105 Intro to the Geopol Environment	5 & 8	3				
NAV 101 Naval Ethics & Leadership	6 & 9	3	Humanities & Fine Arts Elective	6	3	Equiv
			GENG 101 Ethics & Eng Profession	9	3	Equiv[1]
MnTC/General Education Total		30				

Special Notes, if any: *NAV 104 Civil Military Org. and Policy (3 cr): NAV 104 also substitutes for 3 credits of a major technical elective.

SECTION B - Major, Emphasis, Restricted and Unrestricted Electives or Other

College (sending)		University (receiving)		
course prefix, number and name	Cr		Credits	Equiv Sub Wav
MEDR 1617 Computer Assisted Drafting 2-D	3	MFET 115 Engineering Communication	3	Sub
MATH 1447 Introduction to Statistics	4	STAT 239 Statistical Methods I for Physical Sci	4	Equiv
CSCI 1525 C++ for Science and Engineers (4)	4	GENG 102 Engineering Problem Solving	4	Sub
Military Occupation Engineering Technology Training and/or additional ATCC technical courses	13	Major Technical Electives	13	Sub
ENGR 1220 Introduction to Engineering (3) NAV 103 Naval Force Design (3)	6	Major Technical Electives	6	Sub
*NAV 104 Civil Military Organization and Policy (3)		*See Special Notes regarding NAV 104 – Major technical elective	(3)	Sub
Major, Emphasis, Unrestricted Electives Total	30	**Total College Credits Applied (sum of sections A and B)**	60	

Special Notes, if any: Students could bring any combination of Military Occupation Engineering Technology Training credits (as evaluated by ATCC) and technical course work to complete what will be substituted for 13 Major Technical Electives.

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

SECTION C - Remaining University (receiving) Requirements

	course prefix, number and name	Crs
	MnTC Goal Area 1: CMST 192 Intro Communication Studies	3
	MATH 221 Calculus I	4
	MnTC Goal Area 6 & 7: ENGL 216 African American Literature	3
	Upper Division MnTC Goal Area 10: People and the environment	3
	ECON 205 or 206 Macro- or Micro-economics	3
	MFET 240 Metrology	2
	MFET 241 Applied Statics and Dynamics	3
	MFET 242 Applied Thermo & Fluid Mechanics	3
	MFET 243 Strength of Materials	3
	MFET 312 Computer-Aided Design	3
	MFET 330 Production Systems Control	3
	MFET 336 Manufacturing Concepts	3
	MFET 343 Computer Integrated Manufacturing	3
	MFET 345 Manufacturing Processes	3
	MFET 348 Plastic Manufacturing	3
	GENG 360 Engineering Economics	2
	GENG 380 Engineering Communication	2
	MFET 420 Continuous Improvement	3
	MFET 448 Applications of Composite Materials	3
	MFET 450 Design for Manufacturability	3
	MFET 470 MfgET Capstone Project I	3
	MFET 471 MfgET Capstone Project II	3
	Total Remaining University Credits	64

Special Notes, if any:

SECTION D - Summary of Total Program Credits

College (sending) Credits		University (receiving) Requirements	
Section A - MnTC/General Education	30		
Section B - Major, Emphasis, Restricted Electives, Unrestricted Electives or Other	30		
Total Sending Institution Credits	60	**Sections A & B Total Sending Institution Credits Applied**	60
		Section C - Remaining credit to be taken at the receiving institution	64
		Total Receiving Institution Program Credit Length	120
		Total Credits Taken ATCC + SCSU	124

Special Notes, if any:

- St. Cloud State University requires:
  - A minimum of 40 credits at the 300 or 400 level.
  - A minimum of 120 undergraduate semester credits.
  - A cumulative grade point average (GPA) of at least 2.00 for courses taken while enrolled at St. Cloud State University.
  - Successful completion of the St. Cloud State University graduation requirements for the Bachelor of Science degree.

College	Name	Signature	Date
Chief Academic Officer	Sara Fier	Sara Fier	8/15/25
Title			
University	Name	Signature	Date
Provost/VP for Academic Affairs	Dr. Katherina Pattit		7/14/2025
Title			
DARS Encoder	Ashley Livingood		
Date when equivalencies were encoded in DARS by the receiving MnSCU institution.			