An Articulation Agreement Between:
University of Wisconsin (UW) Oshkosh
Northeast Wisconsin Technical College (NWTC)

WTCS Degree Type and Program: **A.A.S. in Electro-Mechanical Technology**
UW Degree Type and Major: **B.S. with a major in Electrical Engineering Technology**

Effective Date: July 1, 2019
☐ New Agreement

Next Review Date: May 1, 2021
☒ Revised Agreement – original agreement signed 15 Dec 2014
– first revision signed 5 July 2017

Agreement Description and Rationale:
This articulation agreement is being established in order to expand educational opportunities for students enrolled in engineering technology programs in northeast Wisconsin. Students enrolling at any higher educational institution in northeast Wisconsin will be able to start their degree at any campus and finish a bachelor's degree in engineering technology at UW Oshkosh. The B.S. degree with a major in Electrical Engineering Technology will be conferred by UW Oshkosh after the successful completion of the specified UW Oshkosh courses in residence at UW Oshkosh in addition to the UW Oshkosh courses transferred from a partnered institution. This will allow for current associate degree holders, new students, and returning students to maximize their educational experiences and decrease redundancy in courses taken and reducing time to degree.

An articulation agreement between the A.A.S. degree in Electro-Mechanical Technology offered at NWTC and the B.S. degree in Electrical Engineering Technology at UW Oshkosh is justified by the close alignment of the curriculums, which leads to efficient transfer of credits and a natural extension of student learning in the transition from a two-year to a four-year degree program.

This articulation agreement is entered into with the understanding that both parties shall remain properly accredited with their respective accrediting bodies, to wit:

- UW Oshkosh: The Higher Learning Commission
- Northeast Wisconsin Technical College: The Higher Learning Commission

Here follows the curriculum agreed upon in this Articulation between UW Oshkosh and Northeast Wisconsin Technical College:

Admission Requirements/Conditions Specific to this Agreement:
Requirements are identical to those required for general admission to UW Oshkosh.

Articulation Transfer Agreement Terms:
The terms of this agreement apply to Northeast Wisconsin Technical College students who successfully complete the A.A.S. degree in Electro-Mechanical Technology; meet the admission requirements set forth below for the UW Oshkosh; and enroll in the B.S. degree with a major in Electrical Engineering Technology.

A transfer course/credit articulation table illustrating the list of courses the student must complete to earn the B.S. degree with a major in Electrical Engineering Technology at UW Oshkosh; course/credit requirements fulfilled at Northeast Wisconsin Technical College; and courses the student must take at UW Oshkosh may be found in Appendix A.

Students must meet the following requirements to confer the B.S. degree with a major in Electrical Engineering Technology at UW Oshkosh:

- The minimum number of credits to earn the B.S. degree from UW Oshkosh is 120.
- A minimum cumulative GPA of 2.0.

- Upper level course work: A minimum of 35 credits must be completed at 300-level or above.
- Credits from four-year institutions: A minimum of 48 credits must be earned from four-year institutions. This does not limit the number of credits that can be transferred from WTCS institutions to UW Oshkosh.
- Credits from UW Oshkosh: A minimum of 30 credits must be earned from UW Oshkosh.
- Residency requirement: Completion of 15 of the last 30 credits earned toward the degree must be from UW Oshkosh.
- Satisfactory completion of the degree credit requirements listed in Appendix A.

Additional coursework completed at Northeast Wisconsin Technical College may be transferrable to satisfy UW Oshkosh general education or breadth requirements. These courses are listed in Appendix A or are searchable through the UW System Transfer Information System (TIS) Wizards (https://www.wisconsin.edu/transfer/wizards/).

Approved by:

University of Wisconsin Oshkosh

June 20, 2019

Colleen McDermott — Date
Dean of College of Letters & Science

6/27/19

John Koker — Date
Provost & Vice Chancellor

7/2/19

Andrew Leavitt — Date
Chancellor

Northeast Wisconsin Technical College

Pamela Mazur — Date
Associate Dean of Trades & Engineering Technologies

Kathryn Rogalske-i — Date
Vice President for Learning

9/4/19

H Jeffrey Rafn — Date
President

Format satisfies UW System Guidelines for Articulation Agreements outlined in the UW System Administrative Policy 140

Appendix A
University of Wisconsin (UW) Oshkosh

WTCS Degree Type and Program: **A.A.S. in Electro-Mechanical Technology**
UW Degree Type and Major: **B.S. with a major in Electrical Engineering Technology**

Effective Date: July 1, 2019

☐ Table accompanies new agreement ☒ Revised table for existing agreement

Transfer Course/Credit Articulation Table:

Northeast Wisconsin Technical College A.A.S. in Electro-Mechanical Technology Transferable Courses/Credits				**UW Oshkosh B.S. with a major in Electrical Engineering Technology All Program Course Requirements**			
Table 1: General Education / Breadth Requirements*							
Course	Title	Gen Ed Area	Xfr Cr.	Course	Title	Gen Ed Area	Req Cr.
801 136	English Composition 1	Comm	3	WBIS 188	Writing Seminar (3 cr)	WBIS	0
801 196	Oral/Interpersonal Comm	Comm	3	COM 111	Intro to Public Speaking (3 cr)	COMM	0
809 198	Intro to Psychology	Soc Sci	3	PSCH 101	General Psychology (3 cr)	XS	0
					Social Science Course (3 cr)	XS	3
					History Course (3 cr)	XS	3
					Ethnic Studies Course (3 cr)	XS, ES	3
					Humanities Course (3 cr)	XC	3
					Humanities Course (3 cr)	XC	3
					English Literature (3 cr)	XC	3
					Global Citizen Course (3 cr)	XC, GC	3
				ENGL 312	Advanced Composition (3 cr)	CONN	3
809 172	Intro to Diversity Studies	Soc Sci	3	SOC 1	Sociology Elective (3 cr)	elective	
801 197	Technical Reporting	Comm	3	ENGL 317	Technical Writing (3 cr)	elective	
General Education Transfer Credits			**15**	**General Education Total – 55-58 credits (includes gen ed credits from Table 2)**			**24**

*Additional coursework not listed here may be transferable to satisfy general education or breadth requirements and are searchable through the UW System Transfer Information System (TIS) Wizards (https://www.wisconsin.edu/transfer/wizards/).

Table 2: Major Program Requirements							
Course	Title	Gen Ed Area	Xfr Cr.	Course	Title	Gen Ed Area	Req Cr.
Support Group (all courses required)							
				MATH 161 MATH 171	Technical Calc I (3 cr) **or** Calculus I (5 cr)	XM	3 **or** 5
				MATH 162 MATH 172	Technical Calc II (3 cr) **or** Calculus II (4 cr)	NS	3 **or** 4
806 143	College Physics 1	Nat Sci	3	PHYS 171	General Physics I (5 cr)	XL, NS	0
Fundamentals Group (all courses required)							
	Waived – Refer to Note 1			EGRT 101	Fund of Eng Technology (2 cr)		0
				EGRT 105	Fund of Drawing (3 cr)		3
660 104 660 105 660 107	DC 1 DC 2 AC 1 + additional NWTC credit		1 1 1	EGRT 130	Electrical Circuits I (4 cr)	XL, NS	1

	(660 108 AC 2)						
				EGRT 131	Electrical Circuits II (4 cr)	XL, NS	4
				CSCI 216	C++ (4 cr)		4
				EGRT 232	Semiconductor Devices (3 cr)		3
664 102 664 103 664 104	Automation 3 Automation 4 Automation 5		1 1 1	EGRT 240	Logic & Control (3 cr)		0
				EGRT 246	Electric Power Systems (3 cr)		3
664 105 664 151	Automation 6 Automation 8 + additional NWTC credit (664 150 Automation 7)		1 1	EGRT 260	Automation Controllers (3 cr)		1
Advanced Study Group (all courses required)							
620 161 620 162 605 157 605 158	Power Electricity 1 Power Electricity 2 Power Electronics 1 Power Electronics 2		1 1 1 1	EGRT 320	Motors & Drives (4 cr)		0
				EGRT 325	Signals & Systems (3 cr)		3
				EGRT 333	Linear Circuits (3 cr)		3
				EGRT 342	Measure & Data Acq (3 cr)		3
				EGRT 350	Data Comm & Protocols (3 cr)		3
				EGRT 360	Project Management (3 cr)		3
620 189	Machine Integrated Tech		3	EGRT 390	Mechatronics (4 cr)		0
	Refer to Note 2			EGRT 400 EGRT 410	Internship (1-3 cr) **or** Capstone Project (3 cr)		1
Advanced Elective (3 cr required)							
				EGR 282	Engineering Economics (3 cr)		3
				EGRT 348	E-Fields & Applications (3 cr)		
				EGRT 352	Communication Systems (3 cr)		
				EGRT 365	Special Topics (3 cr)		
Other NWTC Program Courses							
620 100 620 101 620 165	Fluids 1 Fluids 2 Fluids 3		1 1 1	EGRT 118	Fluid Control		
620 166	Fluids 4		1	EGRT 1	Elective – Refer to Note 3		
442 150	Machine Fabrication 1		1	EGRT 1	Elective – Refer to Note 3		
420 171	Machine Tool Processes 1		1	EGRT 1	Elective – Refer to Note 3		
420 172	Machine Tool Processes 2		1	EGRT 1	Elective – Refer to Note 3		
620 140	Machine Wiring & Safety		1	EGRT 1	Elective – Refer to Note 3		
664 100	Automation 1		1	EGRT 1	Elective – Refer to Note 3		
664 101	Automation 2		1	EGRT 1	Elective – Refer to Note 3		
620 105	Rigging Systems 1		1	EGRT 1	Elective – Refer to Note 3		
620 159	Power Electronics 3		1	EGRT 1	Elective – Refer to Note 3		
620 121	Mechanical Systems 1		1	EGRT 1	Elective – Refer to Note 3		
620 122	Mechanical Systems 2		1	EGRT 1	Elective – Refer to Note 3		
620 144	Basic Mechanics		1	EGRT 1	Elective – Refer to Note 3		
664 160	Control 1		1	EGRT 1	Elective – Refer to Note 3		
664 161	Control 2		1	EGRT 1	Elective – Refer to Note 3		
664 162	Control 3		1	EGRT 1	Elective – Refer to Note 3		
620 170	Intro to Robotics		1	EGRT 1	Elective – Refer to Note 3		
620 172	Robotic Vision Systems		1	EGRT 1	Elective – Refer to Note 3		
620 145	Intro to Bearings		1	EGRT 1	Elective – Refer to Note 3		
620 146	Intro to Laser Alignment		1	EGRT 1	Elective – Refer to Note 3		
620 147	Predictive Maintenance		1	EGRT 1	Elective – Refer to Note 3		

664 170	Safety Devices & Apps		1	EGRT 1	Elective – Refer to Note 3		
620 220	Pumps		1	EGRT 1	Elective – Refer to Note 3		
890 101	College 101		0		No degree or transfer credit		
804 195	College Algebra w/ Apps	Math	3	MATH 104	College Algebra		
804 196	Trigonometry w/ Apps	Math	3	MATH 106	Trigonometry		
Major Program Transfer Credits			**49**	**Major Program Minimum – 70 credits**			**44**
Total Transfer Credits			**64**	**Minimum Additional Credits to B.S. Degree (to satisfy gen ed, major & 120 credit minimum)**			**68**

Notes:

1. Transfer students with an Associate of Applied Science degree in Electro-Mechanical Technology are not required to complete the EGRT 101 Fundamentals of Engineering Technology course for the Bachelor of Science in Electrical Engineering Technology degree. Total UW Oshkosh program and degree credit requirements must still be satisfied.
2. A UW Oshkosh faculty member will serve as the advisor for the Internship or Capstone Project requirement.
3. Elective credits may be used to satisfy total credit requirements for the Electrical Engineering Technology major (70 credits minimum) and the B.S. degree (120 credits minimum).

This articulation agreement may be retrieved from
https://uwosh.edu/engineeringtech/students/transfer/

Questions regarding this agreement may be directed to:

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