An Articulation Agreement Between: University of Wisconsin (UW) Oshkosh Northcentral Technical College (NTC)

WTCS Degree Type and Program: A.A.S. in Mechanical Design Engineering Technology B.S. with a major in Mechanical Engineering Technology

Effective Date: July 1, 2019 Next Review Date: May 1, 2021

□ New Agreement □ Revised Agreement − original agreement signed August 15, 2017

- first revision signed 15 August 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 Wisconsin. Students enrolling at any higher educational institution in 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 Mechanical 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 Mechanical Design Engineering Technology offered at NTC and the B.S. degree in Mechanical 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
- Northcentral Technical College: The Higher Learning Commission

Here follows the curriculum agreed upon in this Articulation between UW Oshkosh and Northcentral 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 Northcentral Technical College students who successfully complete the A.A.S. degree in Mechanical Design Engineering Technology; meet the admission requirements set forth below for the UW Oshkosh; and enroll in the B.S. degree with a major in Mechanical 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 Mechanical Engineering Technology at UW Oshkosh; course/credit requirements fulfilled at Northcentral 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 Mechanical 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 Northcentral 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 (<a href="https://www.wisconsin.edu/transfer/wizards/">https://www.wisconsin.edu/transfer/wizards/</a>).

Approved by:					
University of Wisconsin Oshkosh		Northcentral Technical College			
Colleen McDermott Dean of College of Letters & Science	Date	Darren Ackley Vice President for Learning	Date		
John Koker Provost & Vice Chancellor	Date	Jeannie Worden Executive Vice President of Student Services & Regional Campuses	Date		
Andrew Leavitt Chancellor	Date	Lori Weyers President	Date		

# Appendix A University of Wisconsin (UW) Oshkosh

WTCS Degree Type and Program: A.A.S. in Mechanical Design Engineering Technology UW Degree Type and Major: B.S. with a major in Mechanical Engineering Technology

Effective Date: July 1, 2019

 $\square$  Table accompanies new agreement  $\boxtimes$  Revised table for existing agreement

## **Transfer Course/Credit Articulation Table:**

Northcentral Technical College A.A.S. in Mechanical Design Engineering Technology			UW Oshkosh					
			•	B.S. with a major in Mechanical Engineering Technology All Program Course Requirements				
	Transferable Courses/Cr							
Table 1: General Education / Breadth Requirements*								
		Gen Ed	Xfr			Gen Ed	Req	
Course	Title	Area	Cr.	Course	Title	Area	Cr.	
801 195	Written Communication	Comm	3	WBIS 188	Writing Seminar (3 cr)	WBIS	0	
				COM 111	Intro to Public Speaking (3 cr)	COMM	3	
809 198	Intro to Psychology	Soc Sci	3	PSCH 101	General Psychology (3 cr)	XS	0	
809 196	Intro to Sociology	Soc Sci	3	SOC 101	Intro to Sociology (3 cr)	XS, ES	0	
					History Course (3 cr)	XS	3	
					Social Science Course (3 cr)	XS	3	
					Global Citizen Course (3 cr)	XC, GC	3	
					English Literature (3 cr)	XC	3	
					Humanities Course (3 cr)	XC	3	
					Humanities Course (3 cr)	XC	3	
				ENGL 312	Advanced Composition (3 cr)	CONN	3	
801 197	Technical Reporting	Comm	3	ENGL 317	Technical Writing (3 cr)	elective		
General Education Transfer Credits			12	General Education Total – 55-58 credits			24	
					(includes gen ed credits from	n Table 2)		

<sup>\*</sup>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 (<a href="https://www.wisconsin.edu/transfer/wizards/">https://www.wisconsin.edu/transfer/wizards/</a>).

Table 2: Major Program Requirements									
		Gen Ed	Xfr			Gen Ed	Req		
Course	Title	Area	Cr.	Course	Title	Area	Cr.		
	Support Group (all courses required)								
				MATH 161	Technical Calc I (3 cr) or	XM	3 or		
				MATH 171	Calculus I (5 cr)		5		
				MATH 162	Technical Calc II (3 cr) or	NS	3 or		
				MATH 172	Calculus II (4 cr)		4		
804 154	General Physics 1	Nat Sci	4	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		
606 105	Technical Drafting/CAD		2	EGRT 105	Fund of Drawing (3 cr)		0		
606 106	2D AutoCAD Apps		2						
606 160	Manufacturing Processes		2	EGRT 116	Basic Manufacturing (3 cr)		0		
606 162	Fabrication		2						
612 120	Fluid Power Systems 1		1	EGRT 118	Fluid Control (2 cr)		1		
	+ additional NTC credit				, , ,				
				EGRT 130	Electrical Circuits I (4 cr)	XL, NS	4		
606 133	SolidWorks 1		1	EGRT 207	Parametric Modeling (3 cr)		0		
606 134	SolidWorks 2		1						

606 130	AutoDesk Inventor		2					
606 114	Mechanisms		4	EGRT 221	Machine Components (3 cr)		0	
	Refer to Note 3			EGR 201	Engineering Statics (3 cr)		0	
				EGR 202	Engineering Dynamics (3 cr)		3	
	Refer to Note 3			EGR 203	Mechanics of Materials (4 cr)		4	
Advanced Study Group (all courses required)								
				EGRT 320	Motors & Drives (4 cr)	NS	4	
606 125	Design Problems		3	EGRT 322	Eng Design Problems (3 cr)		0	
				EGRT 330	Thermodynamics (3 cr)		3	
				EGRT 335	Heat Transfer (3 cr)		3	
				EGRT 342	Measure & Data Acq (3 cr)		3	
				EGRT 360	Project Management (3 cr)		3	
				EGRT 390	Mechatronics (4 cr)		4	
	Refer to Note 2			EGRT 400	Internship (1-3 cr) or		1	
				EGRT 410	Capstone Project (3 cr)			
		Adva	nced l	Elective (3 cr re	equired)			
				EGR 282	Engineering Economics (3 cr)		3	
				EGRT 308	Finite Element Analysis (3 cr)			
				EGRT 318	Fluid Mechanics (3 cr)			
				EGRT 365	Special Topics (3 cr)			
		Oth	her NT	TC Program Co	ourses			
606 132	Materials of Industry		2	EGRT 1	Elective credit – see Note 4			
606 128	Technical Detailing		2	EGRT 1	Elective credit – see Note 4			
606 111	Applied Mechanics		3	EGRT 1	Elective credit eligible for			
606 163	Strength of Materials		3		conversion to equivalent			
					courses – Refer to Note 3			
606 115	Machine Design 1		2	EGRT 1	Elective credit – see Note 4			
606 117	Machine Design 2		3	EGRT 1	Elective credit – see Note 4			
606 108	Geometric Dim & Tol		1	EGRT 1	Elective credit – see Note 4			
606 107	Design for Manufacture		4	EGRT 1	Elective credit – see Note 4			
606 116	Tooling & Production		2	EGRT 1	Elective credit – see Note 4			
606 109	Computer Analysis		1	EGRT 1	Elective credit – see Note 4			
804 195	College Algebra w/Apps	Math	3	MATH 104	College Algebra			
Major Program Transfer Credits			50	Major Program Minimum – 72 credits			42	
<b>Total Transfer Credits</b>			62	Minimum Additional Credits to B.S. Degree			66	
				(to satisfy gen ed, major & 120 credit minimum)				

## **Notes:**

- Transfer students with an Associate of Applied Science degree in Mechanical Design Engineering Technology are not required to complete the EGRT 101 Fundamentals of Engineering Technology course for the Bachelor of Science in Mechanical 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. 606 111 Applied Mechanics (3 cr) AND 606 163 Strength of Materials AND {MATH 161 Technical Calculus I (3 cr) OR MATH 171 Calculus I (5 cr)} AND EGRT 222 Engineering Mechanics for Transfers (2 cr) will satisfy EGR 201 Statics for Engineering (3 cr) AND EGR 203 Mechanics of Materials for the major in Mechanical Engineering Technology only. See <a href="https://uwosh.edu/engineeringtech/mechanical/courses/">https://uwosh.edu/engineeringtech/mechanical/courses/</a> for course descriptions and prerequisites.
- **4.** Elective credits may be used to satisfy total credit requirements for the Mechanical Engineering Technology major (72 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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