

**PROGRAM TO PROGRAM ARTICULATION AGREEMENT**  
**University of Wisconsin – Stevens Point (UWSP)**  
**College of Letters and Science, School of Humanities and Global Studies**  
**Multidisciplinary Major – Technology Management Option**  
and  
**Northcentral Technical College (NTC)**  
**Automation Systems Technology**

**Effective Date:** January 1, 2024

**NTC Associate Degree:** Associate of Applied Science Degree, Automation Systems Technology

**UWSP Baccalaureate Degree:** Bachelor of Science Degree, Multidisciplinary Major – Technology Management Option

**Purpose:**

This articulation agreement provides the opportunity for Northcentral Technical College Automation Systems Technology students to be awarded the following equivalent credits upon entry to the University of Wisconsin-Stevens Point Multidisciplinary Major: Technology Management Option.

**Transfer Courses:**

<i>General Education Courses</i>					
NTC			UWSP		
Course No.	Course Title	Credits	Course No.	Course Title/Field	Credits
10-801-195	Written Communication <u>OR</u>	3	ENGL 101	Academic Reading and Writing (GEP: WC)	3
10-801-136	English Composition 1				
10-801-196	Oral/Interpersonal Communication	3	COMM 180	Fdns Workplace Communication (GEP: CT)	3
10-804-195	College Algebra w/Apps <u>OR</u>	3 <u>OR</u>	MATH 118	Pre-Calculus Algebra (GEP: QL) <u>OR</u>	3 <u>OR</u>
10-804-118	Intermediate Algebra w/Apps	4	MATH 95 MATH 107	Intermediate Algebra <u>AND</u> Algebra for Pre-Calculus	2 <sup>1</sup>
10-806-154	General Physics 1	4	PHYS 201	PHYS 201 Applied Principles of Physics	4
10-806-144	College Physics 2	3	NSC 1XX	Natural Science Elective (GEP: NSC)	3
10-809-172	Intro to Diversity Studies <u>OR</u>	3	SSUS 1XX	SSUS 100-Level Elective (GEP: SS, USD) <u>OR</u>	3
10-809-196	Intro to Sociology		SOC 101	Introduction to Sociology (GEP: SS, USD)	
10-809-199	Psychology of Human Relations <u>OR</u>	3	SS 1XX	SS 100-Level Elective (GEP: SS) <u>OR</u>	3
10-809-198	Intro to Psychology		PSYC 110	Introduction to Psychology (GEP: SS)	
10-890-165	College 101	1	ELEC 1XX	100-Level Elective	1
	<b>Total general education credits earned:</b>	<b>23-24</b>			
	Total transferable general education credits:			<b>Total general education credits accepted:</b>	<b>22-23</b>

<b>Occupational Courses</b>					
<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>	<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>
10-612-120	Fluid Power Systems 1: Fundamentals	1	ELEC 1XX	ELEC 100-Level Elective	1
10-612-121	Fluid Power Systems 2: Fundamentals of Pneumatics	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-151	Machine Control 1: Ladder Logic Fundamentals	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-152	Machine Control 2: Motor and Actuator Control	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-153	Machine Control 3: Sensors and Machine Safety	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-172	Industry Workplace Safety	1	ELEC 1XX	ELEC 100-Level Elective	1
10-660-118	Electrical Fabrication	1	ELEC 1XX	ELEC 100-Level Elective	1
10-660-123	Industrial Electronics Technology 1 - Direct Current Electrical Characteristics	1	ELEC 1XX	ELEC 100-Level Elective	1
10-660-124	Industrial Electronics Technology 2 - Alternating Current Electrical Characteristics	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-154	Robot Applications 1: Fund of Robotic Control	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-155	Robot Applications 2: Robotic System Components and Software	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-156	Robotic Applications 3: Automated Robot Control Systems Interfacing	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-164	PLC 1: PLC Fund and Bit Based Instructions	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-165	PLC 2: Timers, Counters and Program Control	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-166	PLC 3: Data, Math, Sequencer and Shift Instructions	1	ELEC 1XX	ELEC 100-Level Elective	1
10-660-121	Intro to Microcontrollers	1	ELEC 1XX	ELEC 100-Level Elective	1
10-660-125	Industrial Electronics Tech 3: Electronic Circuits and Devices	1	ELEC 1XX	ELEC 100-Level Elective	1
10-664-101	AutoCad Electrical	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-160	Industrial Motors 2: DC/AC Variable Speed Motor Drives	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-161	Servo Systems 1: Fund of Industrial Control Systems	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-162	Servo Systems 2: Motion Control Systems	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-163	Servo Systems 3: Adv Position Control & Integration	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-167	PLC 4: Adv Instructions & Programming	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-168	PLC 5: Industrial Networking	1	ELEC 1XX	ELEC 100-Level Elective	1
10-620-169	PLC 6: PLC, PAC & PC Automation Integration	1	ELEC 1XX	ELEC 100-Level Elective	1
10-664-100	Ethernet IP	1	ELEC 1XX	ELEC 100-Level Elective	1
10-664-102	Factory Talk Me Visualization Foundations	1	ELEC 1XX	ELEC 100-Level Elective	1
10-664-104	Needs Analysis	1	ELEC 1XX	ELEC 100-Level Elective	1
10-664-109	Remote IO for PLC Applications	1	ELEC 1XX	ELEC 100-Level Elective	1
10-664-103	Industrial Applications	1	ELEC 1XX	ELEC 100-Level Elective	1
10-664-106	SCADA Systems 1	1	ELEC 1XX	ELEC 100-Level Elective	1
10-664-111	SCADA Systems 2	1	ELEC 1XX	ELEC 100-Level Elective	1
10-664-107	Capstone Cell Integration	4	ELEC 1XX	ELEC 100-Level Elective	4
10-664-108	Advanced Drive Applications	1	ELEC 1XX	ELEC 100-Level Elective	1
10-664-110	Introduction to Safety PLC Programming	1	ELEC 1XX	ELEC 100-Level Elective	1
	<b>Total occupational course credits earned:</b>	<b>38</b>		<b>Total occupational course credits accepted:</b>	<b>38</b>
	<b>Elective credits allowed:</b>			<b>Elective credits allowed:</b>	
	<b>Total transferable credits:</b>	<b>61-62</b>		<b>Total credits accepted at UWSP:</b>	<b>60-61</b>

**Courses needed to complete BS Multidisciplinary Major: Technology Management Option at UW-Stevens Point:**

<b>Courses needed to complete degree at UWSP:</b>		
<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>
<b>Courses in the major<sup>2</sup>:</b>		
Science and Engineering Skills - 16 credits		
CHEM 105	Fundamental Chemistry	5
CHEM 106	Fundamental Chemistry	5
ENGR 105	Engineering Fundamentals	3
ENGR 107	Engineering Graphics with Computer Aided-Drafting	3
Management Skills - 15 credits		
BUS 320	Principles of Management <u>OR</u>	3
BUS 325	Organizational Behavior	
BUS 322	Business Leadership for Managers	3
BUS 329	Project Management <u>OR</u>	3
PSEN 316	Engineering Economics and Project Management	
BUS 360	Principles of Production-Operations Management	3
PSYC 345	Industrial Organizational Psychology	3
Communication Skills - Take 12 credits from the courses below		
BUS 201	Writing and Presenting for Business	3
BUS 301	Building Relationships for Business	3
COMM 345	Small Group Communication	3
COMM 394	Business and Professional Communication	3
ENGL 254	Workplace Writing	3
ENGL 351	Advanced Business Writing	3
ENGL 352	Writing for Digital Media	3
ENGL 354	Advanced Scientific and Technical Writing	3
<b>General Education Program courses<sup>3</sup>:</b>		
ENGL 202	Academic Writing and Research	3
WLN	GEP: Wellness	1
GEP	GEP: Arts	3
GEP	GEP: Humanities	3
GEP	GEP: Historical Perspectives	3
GEP	Global Awareness and Environmental Responsibility, may be satisfied with coursework above	0-6
GEP	GEP: Quantitative Literacy	0-3
<b>Total credits needed at UWSP to complete degree<sup>4</sup>:</b>		<b>56-65</b>

**TRANSFER FOOTNOTES:**

<sup>1</sup> The 4-credit NTC Intermediate Algebra w/Apps (10-804-118) transfers to UWSP as MATH 95 and MATH 107 (2 credits). However, MATH 95 does not count toward college credit in fulfillment of the 120 credits required for a degree and is noted here.

<sup>2</sup> In addition to credits in major courses listed above, additional 300/400-level credits may be required to satisfy university graduation requirement of at least 32 credits at the 3XX/4XX levels. 3XX courses are available for some of the GEP categories (e.g., Humanities, Historical Perspectives and Quantitative Literacy).

<sup>3</sup> Exact number of credits depends on course selection. Quantitative Literacy requirement may possibly be fulfilled by MATH taken for associate program.

<sup>4</sup> A minimum of 120 credits are required for graduation. Depending on course options, some students may complete the program requirements with fewer than 120 credits and an additional elective course may be required to reach 120 credits.

**SPECIAL CONSIDERATIONS:**

1. The acceptance of credits applies only to this specific Program-to-Program Articulation.
2. For acceptance of equivalent courses, NTC courses must have been completed within the last 5 years. Beyond this period of time, course equivalents will be assessed on an individual basis.
3. Students transferring under this agreement must have a minimum cumulative GPA of 2.25 in associate program coursework at NTC.
4. This agreement is subject to review if either NTC or UWSP undergoes curriculum revision OR within five years of the origination date of this agreement, whichever occurs earlier.