

## TRANSFER GUIDE - ASSOCIATE DEGREE PROGRAMS NTC Program: ELECTROMECHANICAL

UW Stout Program: Automation Leadership
Minimum GPA for admission: 2.0
Initial effective date: Fall 2023

General Education Courses

	NTC	UW Stout			
Course No.	Course Title	Credits	Course No.	Course Title/Field	Credits
10-804-195	College Algebra with Apps (3 cr.) <u>OR</u>	3 or 4	MATH 120	College Algebra	З
10-804-118	Intermediate Algebra with Apps (4 cr.)	5014	MATH 090	Credit not transferable	5
10-806-154	General Physics 1	4	PHYS 241	College Physics 1	4
10-806-144	College Physics 2	3	PHYS-GLX	Physics Natural Science without Lab	3
10-801-196	Oral/Interpersonal Communication	3	COMST 100	Fundamentals of Speech	3
10-801-195	Written Communication OR	3	ENGL 101	Composition 1	S
10-801-136	English Composition 1	5	LINGL IUT		5
10-809-172	Intro to Diversity <u>OR</u>	3	SOC-GAGCS	Sociology Elective	3
10-809-196	Intro to Sociology	5	SOC 110	Intro to Sociology	5
10-809-198	Intro to Psychology <u>OR</u>	3	PSYC-GXX	Psychology Electives	3
10-809-199	Psychology of Human Relations	5	PSYC 110	Intro to Psychology	5
10-890-165	College 101	1		Not Transferable	
	Total general education credits earned:	23-24			
	Total transferable general education credits:			Total general education credits accepted:	22

Occupational Courses							
Course No.	Course Title	Credits	Course No.	Course Title	Credits		
10-660-118	Electrical Fabrication	1					
10-612-120	Fluid Power Systems 1: Fundamentals	1					
10-612-121	Fluid Power Systems 2: Fundamentals of Pneumatics	1					
10-620-172	Industry Workplace Safety	1					
10-660-123	Industrial Ele Tech 1- Direct Current Ele Characteristics	1					
10-660-124	Industrial Ele Tech 2- Alternating Current Ele Characteristics	1					
10-620-171	AutoCAD for Technicians OR	1					
10-664-101	AutoCAD Electrical	I					
10-606-133 Solidworks 1		1					
10-660-121	Intro to Microcontrollers	1					
10-620-151	Machine Control 1: Ladder Logic Fund	1					
10-620-152	Machine Control 2: Motor & Actuator Control	1					
10-620-153	Machine Control 3: Sensors & Machine Safety	1					

10-620-157	Mechanical Systems 1: Basic Machine Comp	1		
10-620-158	Mechanical Systems 2: Power Trans Systems	1		
10-620-159	Industrial Motors 1: Electric Motors	1		
10-660-125	Industrial Ele Tech 3- Electronic Circuits and Devices	1		
10-660-126	Industrial Ele Tech 4- Electrical Systems	1	UW-Stout Accepts all Core course credits as	20
10-660-127	Industrial Ele Tech 5- Advanced Electrical Characteristics	1	Engineering Electives	30
10-660-128	Industrial Ele Tech 6- Advanced Digital Concepts	1		
10-420-101	Intro to Machine Shop	2		
10-620-154	Robot App 1: Fundamentals of Robotic Control	1		
10-620-155	Robot App 2: Robotic System Comp & Software	1		
10-620-160	Industrial Motors 2: DC/AC Var Speed Motor Dr	1		
10-620-161	Servo Sys 1: Fundamentals of Industrial Control Systems	1		
10-620-162	Servo Sys 2: Motion Control Systems	1		
10-620-173	Electromechanical Troubleshooting	1		
10-620-164	PLC 1: PLC Fundamentals And Bit Based Instruction	1		
10-620-165	PLC 2: Timers, Counters, And Program Control	1		
10-620-166	PLC 3: Data, Math, Sequencer And Shift Instructions	1		
10-620-167	PLC 4: Advanced Instructions & Programming	1		
10-442-101	Intro to Welding	1		
10-620-163	Servo Systems 3: Advanced Position Control & Integration	1		
10-620-145	Electromechanical Projects	3		
10-620-168	PLC 5: Industrial Networking	1		
10-620-169	PLC 6: PLC, PAC And PC Automation Integration	1		
	Total occupational course credits earned:	38		38
	Total credits required for graduation:	61-62		
	Total transferable credits:		Total credits accepted at UW-Stout:	60

SACA Certificate Transfer Core						
Students can choose to complete any 7 of the following 14 credentials for credits towards your Bachelors Degree						
Course No.	Course Title	Credits	Course No.	Course Title	Credits	
C-211	Industry 4.0 Total Productive Maintenance Mgmt.	3				
C-305	Industry Electronic Systems 1	3				
C-308	Variable Frequency Drive Systems 2	3				
C-309	Programmable Controller Systems 2	3				
C-310	Ethernet Communications 2	3				
C-312	Robot Systems Integration 2	3				
C-313	Smart Factory Systems 2	3				
C-359	Programmable Controller Systems 3	3		Engineering Technology Electives	21	

C-362	Machine Vison Systems 1	3		
C-306	Industrial Electronic Systems 2	3		
C-307	Electronic Systems Installation 1	3		
C-358	Autonomous Mobile Robot Systems 1	3		
C-360	Motion Control Systems 1	3		
C-361	Programmable Conveyor Systems 1	3		
	Total general education credits earned:	21	Total general education credits accepted:	21
	Total transferable credits:		Total credits accepted at UW-Stout:	81

## Courses needed to complete degree at UW-Stout:

Course No.	Course Title	Credits					
ENGL 102	Composition 2	3					
	Arts and Humanities	6					
	Social Responsibility and Ethical Reasoning	3					
	Core Electives	6					
	Program Electives	2					
or 565	Project Management	3					
or 600	Organizational Leadership	3					
OR 640	Lean Enterprise	3					
or 641	Digital Transformation	3					
or 642	Internet of Things in Operations	3					
INMGT 443	Automation Leadership Capstone	3					
INMGT 449	Cooperative Education Experience	1					
Total credits	Total credits needed at UW-Stout to complete degree: 39						

Disclaimer: Students planning to transfer should contact NTC's Transfer Specialist and transfer personnel at UW-Stout for the most current transfer information. **Updated on** 8/31/23