Northcentral TECHNICAL COLLEGE

TRANSFER GUIDE - ASSOCIATE DEGREE PROGRAMS
NTC Program: AUTOMATION SYSTEMS TECHNOLOGY
UW-Stout Program: Automation Leasdership
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**
10-801-195 10-801-136	Written Communication OR English Composition 1	3	ENGL 101	Composition 1	3
10-801-196	Oral/Interpersonal Communications	3	COMST 100	Fundamentals of Speech	3
10-804-195	College Algebra w/Apps OR	3	Math 120	College Algebra	3
10-804-118	Intermediate Algebra w/Apps	4	Math 90	Credits not transferable	
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
10-809-172 10-890-196	Intro to Diversity Studies OR Intro to Sociology	3	SOC-GAGCS SOC 110	Sociology Elective Intro to Sociology	3
10-809-199 10-809-198	Psychology of Human Relations OR Intro to Psychology	3	PSYC-GXX PSYC 110	Psychology Electives Intro to Psychology	3
10-890-165	College 101	1		Not Transferable	
	Total general education credits earned:	**23 or 24**			
	Total transferable general education credits:			**Total general education credits accepted:**	**22**

Occupational Courses

Course No.	Course Title	Credits	Course No.	Course Title	Credits
10-612-120	Fluid Power Systems 1: Fundamentals	1			
10-612-121	Fluid Power Systems 2: Fundamentals of Pneumatics	1			
10-620-151	Machine Control 1: Ladder Logic Fundamentals	1			
10-620-152	Machine Control 2: Motor and Actuator Control	1			
10-620-153	Machine Control 3: Sensors and Machine Safety	1			
10-620-172	Industry Workplace Safety	1			
10-660-118	Electrical Fabrication	1			
10-660-123	Industrial Electronics Technology 1 - Direct Current Electrical Characteristics	1			
10-660-124	Industrial Electronics Technology 2 - Alternating Current Electrical Characteristics	1			
10-620-154	Robot Applications 1: Fund of Robotic Control	1			
10-620-155	Robot Applications 2: Robotic System Components and Software	1			
10-620-164	PLC 1: PLC Fund and Bit Based Instructions	1			
10-620-165	PLC 2: Timers, Counters and Program Control	1			

10-620-166	PLC 3: Data, Math, Sequencer and Shift Instructions	1				
10-660-121	Intro to Microcontrollers	1				
10-660-125	Industrial Electronics Tech 3: Electronic Circuits and Devices	1		UW-Stout Accepts all Core course credits as Engineering Electives	37	
10-664-101	AutoCAD Electrical	1				
10-620-160	Industrial Motors 2: DC/AC Variable Speed Motor Drives	1				
10-620-161	Servo Systems 1: Fund of Industrial Control Systems	1				
10-620-162	Servo Systems 2: Motion Control Systems	1				
10-620-163	Servo Systems 3: Adv Position Control & Integration	1				
10-620-167	PLC 4: Adv Instructions & Programming	1				
10-620-168	PLC 5: Industrial Networking	1				
10-620-169	PLC 6: PLC, PAC & PC Automation Integration	1				
10-664-100	Ethernet IP	1				
10-664-102	Factory Talk Me Visualization Foundations	1				
10-664-104	Needs Analysis	1				
10-664-109	Remote IO for PLC Applications	1				
10-664-103	Industrial Applications	1				
10-664-106	SCADA Systems 1	1				
10-664-111	Scada Systems 2	1				
10-664-107	Capstone Cell Integration	4				
10-664-108	Advanced Drive Applications	1				
10-664-110	Introduction to Safety PLC Programming	1				
	Total occupational course credits earned:	**37**		**Total occupational course credits accepted:**		**37**
	Elective credits allowed:			**Elective credits allowed:**		
	Total credits required for graduation:	**61 or 62**				
	Total transferable credits:			**Total credits accepted at UW-Stout:**		**59**

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			

					Engineering Technology Electives	21
C-359	Programmable Controller Systems 3	3				
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:**	**80**

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	3
INMGT 365 or 565	Project Management	3
INMGT 400 or 600	Organizational Leadership	3
INMGT 440 OR 640	Lean Enterprise	3
INMGT 441 or 641	Digital Transformation	3
INMGT 442 or 642	Internet of Things in Operations	3
INMGT 443	Automation Leadership Capstone	3
INMGT 449	Cooperative Education Experience	1
Total credits needed at UW-Stout to complete degree:		**40**

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