



TRANSFER GUIDE - ASSOCIATE DEGREE PROGRAMS

NTC Program: Smart Manufacturing

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 |
| 10-806-154 | General Physics 1 | 4 | PHYS 241 | College Physics 1 | 4 |
| 10-804-195 | College Algebra w/Apps OR | 3 or 4 | MATH 120 | College Algebra | 3 |
| 10-804-118 | Intermediate Algebra w/apps | | MATH 090 | Credit not transferable | |
| 10-801-196 | Oral/Interpersonal Communication | 3 | COMST 100 | Fundamentals of Speech | 3 |
| 10-801-195 | Written Communication OR | 3 | ENGL 101 | Composition 1 | 3 |
| 10-801-136 | English Composition 1 | | | | |
| 10-809-172 | Introduction to Diversity Studies OR | 3 | SOC-GAGCS | Sociology Elective OR | 3 |
| 10-809-196 | Intro to Sociology | | SOC 110 | Intro to Sociology | |
| 10-809-199 | Psychology of Human Relations | 3 | PSYC-GXX | Psychology Electives | 3 |
| 10-809-198 | Intro to Psychology | | PSYCH 110 | Intro to Psychology | |
| 10-890-165 | College 101 | 1 | | Not Transferable | |
| Total general education credits earned: | | 20-21 | | | |
| Total transferable general education credits: | | | Total general education credits accepted: | | 19 |

Occupational Courses

| Course No. | Course Title | Credits | Course No. | Course Title | Credits |
|------------|--|---------|------------|---|---------|
| 10-620-151 | Machine Control 1: Ladder Logic Fundamentals | 1 | | | |
| 10-620-152 | Machine Control 2: Motor & Actuator Control | 1 | | | |
| 10-620-153 | Machine Control 3: Sensors and Machine Safety | 1 | | | |
| 10-620-172 | Industry Workplace Safety | 1 | | | |
| 10-623-119 | Quality Assurance | 1 | | | |
| 10-623-203 | Precision Measuring | 2 | | | |
| 10-660-123 | Industrial Electronics Tech 1 | 1 | | | |
| 10-660-124 | Industrial Electronics Tech 2 | 1 | | | |
| 10-612-120 | Fluid Power Systems 1: fundamentals | 1 | | | |
| 10-620-161 | Servo Systems 1: Fundamentals of Indust. Cont. | 1 | | | |
| 10-620-164 | PLC 1: PLC Fundamentals and Bit Based Instruct. | 1 | | | |
| 10-620-165 | PLC 2: Timers, Counters and Program control | 1 | | | |
| 10-620-166 | PLC 3: Data, Math, Sequencer and Shift Instructors | 1 | | | |
| 10-623-200 | Interpreting Engineering Drawings | 1 | | | |
| 10-660-125 | Industrial Electronics Tech 3 | 1 | | | |
| 10-664-112 | Industry 4.0 Fundamentals | 1 | | | |
| 10-620-154 | Robotic Applications 1: Fundamentals | 1 | | | |
| | | | | UW-Stout Accepts all Core course credits as Engineering Electives | 40 |

| | | | | | |
|--|--|--------------|-----------|--|-----------|
| 10-620-155 | Robotic Applications 2: Robotic System | 1 | | | |
| 10-620-163 | Servo Systems 3: advanced Position | 1 | | | |
| 10-620-167 | PLC 4: Advanced Instructions and Program | 1 | | | |
| 10-620-168 | PLC 5: Industrial Networking | 1 | | | |
| 10-620-169 | PLC 6: PLC, PAC and PC Automation | 1 | | | |
| 10-623-175 | Manufacturing Processes | 3 | | | |
| 10-664-113 | Industrial Internet of Things | 1 | | | |
| 10-664-114 | Designing a Solution in a Smart Factory | 1 | | | |
| 10-196-189 | Team Building and Problem Solving | 3 | | | |
| 10-606-132 | Materials of Industry | 2 | | | |
| 10-623-112 | Statistical Process Control | 2 | | | |
| 10-664-115 | Collaborative Robotics and Vision | 1 | | | |
| 10-664-117 | Simulation and AI | 1 | | | |
| 10-664-118 | Producing Products in an Intelligent Factory | 3 | | | |
| 10-623-147 | Lean Manufacturing Fundamentals | 2 | INMGT-440 | Lean Enterprise | 3 |
| 10-623-173 | Introduction to Six Sigma | 3 | | | |
| Total occupational course credits earned: | | 45 | | Total occupational course credits accepted: | 43 |
| Elective credits allowed: | | | | Elective credits allowed: | |
| Total program credits: | | 65-66 | | | |
| Total transferable credits: | | 65 | | Total credits accepted at UW-Stout: | 62 |

| 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 | | Engineering Technology Electives | 21 |
| 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 | | | |
| C-362 | Machine Vision 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: | 83 |

Courses needed to complete degree at UW-Stout:

| Course No. | Course Title | Credits |
|---|---|----------------|
| ENGL 102 | Composition 2 | 3 |
| | Analytical Reasoning and Natural Sciences | 3 |
| | Arts and Humanities | 6 |
| | Social Responsibility and Ethical Reasoning | 3 |
| | Core Electives | 6 |
| INMGT 365 or 565 | Project Management | 3 |
| INMGT 400 or 600 | Organizational Leadership | 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: | | 37 |

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