



**Northwood Technical College (Northwood Tech) Automated Packaging Systems Technician / Industry 4.0 Smart Automation / Mechatronics Basics Certification Crosswalk (2023-2024)** Educational and training experiences offered through company training programs or through professional institutions may be reviewed for transfer credit. **Official certificates or original records (as noted below) must be submitted to verify the credential earned.**

| The following current industry certification                                                                                                                                                                                                                                                                                                    | =                                                                                         | Northwood Tech Automated Packaging Systems Technician, Industry 4.0 Smart Automation and Mechatronics Basics Program Courses                                                                                                                                                                                                                                           |
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| PMMI Mechatronics Certification Test:<br>Industrial Electricity 1 (Level 1)<br><i>Northwood Tech Staff: (Test Component: IE1)</i>                                                                                                                                                                                                               | This certification may allow for transfer credit for the following Northwood Tech courses | 32-414-335 DC Electricity<br><i>This course is in the following programs: Automated Packaging Systems Technician, Industry 4.0 Smart Automation and Mechatronics Basics</i><br><b>AND</b><br>32-414-336 AC Electricity<br>(prerequisite 32-414-335)<br><i>This course is in the following programs: Automated Packaging Systems Technician and Mechatronics Basics</i> |
| PMMI Mechatronics Certification Test:<br>Fluid Power 1 (Level 1)<br><i>Northwood Tech Staff: (Test Component: FP1)</i>                                                                                                                                                                                                                          | This certification may allow for transfer credit for the following Northwood Tech course  | 32-454-341 Fluid Power Systems<br><i>This course is in the following programs: Automated Packaging Systems Technician, Industry 4.0 Smart Automation and Mechatronics Basics</i>                                                                                                                                                                                       |
| PMMI Mechatronics Certification Test:<br>Programmable Logic Controllers (PLCs) 1 (Level 1)<br><i>Northwood Tech Staff: (Test Component: PLC1)</i>                                                                                                                                                                                               | This certification may allow for transfer credit for the following Northwood Tech course  | 32-454-345 Packaging Systems Equipment Control<br>(prerequisite 32-414-335)<br><i>This course is in the following programs: Automated Packaging Systems Technician, Industry 4.0 Smart Automation and Mechatronics Basics</i>                                                                                                                                          |
| PMMI Mechatronics Certification Test:<br>Mechanical Components 1 (Level 1)<br><i>Northwood Tech Staff: (Test Component: MC1)</i>                                                                                                                                                                                                                | This certification may allow for transfer credit for the following Northwood Tech course  | 32-454-357 Power Transmission Componentry<br>(corequisite 32-454-345)<br><i>This course is in the following programs: Automated Packaging Systems Technician, Industry 4.0 Smart Automation and Mechatronics Basics</i>                                                                                                                                                |
| To Verify Validity of the PMMI Certifications, go to <a href="#">The Association for Packaging and Processing Technologies Website</a><br>**No expiration on the individual Level 1 certifications as of 6/28/2016. However, in the future there may be expirations to the overarching Level 1 Certification – verify with PMMI on any changes. |                                                                                           |                                                                                                                                                                                                                                                                                                                                                                        |

| The following current industry certification                                                                                                                            | =                                                                                        | Northwood Tech Automated Packaging Systems Technician, Industry 4.0 Smart Automation and Mechatronics Basics Program Courses                                                                                                  |
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| SACA - C201 Electrical Systems 1 and C205 Sensor Logic Systems 1 Gold Certificates<br><i>Northwood Tech Staff: (Test Component: C205+)</i>                              | This certification may allow for transfer credit for the following Northwood Tech course | 32-414-335 DC Electricity<br><i>This course is in the following programs: Automated Packaging Systems Technician, Industry 4.0 Smart Automation and Mechatronics Basics</i>                                                   |
| SACA - C209 Pneumatic Systems 1, C255 Hydraulics Systems 1, and C256 Hydraulic Maintenance 1 Gold Certificates<br><i>Northwood Tech Staff: (Test Component: C209+)</i>  | This certification may allow for transfer credit for the following Northwood Tech course | 32-454-341 Fluid Power Systems<br><i>This course is in the following programs: Automated Packaging Systems Technician, Industry 4.0 Smart Automation and Mechatronics Basics</i>                                              |
| SACA - C201 Electrical Systems 1 and C202 Electric Motor Control Systems 1 Gold Certificates<br><i>Northwood Tech Staff: (Test Component: C202+)</i>                    | This certification may allow for transfer credit for the following Northwood Tech course | 32-414-336 AC Electricity<br>(prerequisite 32-414-335)<br><i>This course is in the following programs: Automated Packaging Systems Technician and Mechatronics Basics</i>                                                     |
| SACA - C207 Programmable Controller Systems 1 Gold Certificates<br><i>Northwood Tech Staff: (Test Component: C207)</i>                                                  | This certification may allow for transfer credit for the following Northwood Tech course | 32-454-345 Packaging Systems Equipment Control<br>(prerequisite 32-414-335)<br><i>This course is in the following programs: Automated Packaging Systems Technician, Industry 4.0 Smart Automation and Mechatronics Basics</i> |
| SACA - C210 Mechanical Power Systems 1 Gold Certificates<br><i>Northwood Tech Staff: (Test Component: C210)</i>                                                         | This certification may allow for transfer credit for the following Northwood Tech course | 32-454-357 Power Transmission Componentry<br>(corequisite 32-454-345)<br><i>This course is in the following programs: Automated Packaging Systems Technician, Industry 4.0 Smart Automation and Mechatronics Basics</i>       |
| SACA – C208 Programmable Controller Troubleshooting 1 and C214 Smart Factory Systems 1 Gold Certificates<br><i>Northwood Tech Staff: (Test Component: C208)</i>         | This certification may allow for transfer credit for the following Northwood Tech course | 32-414-380 Advanced PLC<br>(prerequisite 32-414-335)<br><i>This course is in the following programs: Automated Packaging Systems Technician and Industry 4.0 Smart Automation</i>                                             |
| To Verify Validity of the SACA Certifications, go to <a href="https://www.saca.org/">Specialist Certifications   Smart Automation Certification Alliance (saca.org)</a> |                                                                                          |                                                                                                                                                                                                                               |
| FANUC - HandlingTool Operations & Programming AND FANUC iRVision 2D (R-30iB) Operation and Programming<br><i>Northwood Tech Staff: (Test Component: FANU)</i>           | This certification may allow for transfer credit for the following Northwood Tech course | 32-454-366 Introduction to Robotics<br>(prerequisites 32-414-335 and 32-414-336)<br><i>This course is in the following programs: Automated Packaging Systems Technician and Industry 4.0 Smart Automation</i>                 |
| To Verify Validity of the FANUC Certifications, go to <a href="https://www.fanucamerica.com/support/training">https://www.fanucamerica.com/support/training</a>         |                                                                                          |                                                                                                                                                                                                                               |

NORTHWOOD TECH STAFF ONLY: Updated: 12/4/2017; 2/15/2018; 7/13/2018, 11/30/2018, 6/3/2019, 2/3/2020, 3/25/2021; 7/7/21, 12/9/2021, 2/6/2023, 3/31/2023, 8/24/2023

Academic Affairs / Industry Credentials and CPL Crosswalks - Northwood Tech CPL Data Entry Instructions

TESTID (for all): PMMI L1

Test Component (see boxes above for specific test component information)

RCC CODE (for all): 5J (Exam – National Standard)

Mechatronics Basics & Industry 4.0 Smart Automation students will need to complete 25% of their required program credits (32xxxxx courses) through Northwood Tech to be awarded the degree. This means: Mechatronics Basics students will be required to take a minimum of 5 credits & Industry 4.0 Smart Automation students will be required to take a minimum of 4 credits.