

INDUSTRIAL COMMUNICATIONS AND DATA ANALYTICS, SC

PSLO3: Demonstrate the integration of managed and unmanaged switches with automation equipment

PSLO4: Describe the impact of IIoT in manufacturing.

Program Description

The Skills Certificate, Industrial Communication and Data Analytics will prepare students for working in environments where advanced automation is present. Concepts such as networking, asset tracking, programming, and Industrial Internet of Things (IIoT) will be explored. Competencies realized here should allow students to collect, interpret, analyze, and display data gathered in a manufacturing environment in a meaningful and coherent manner.

This program is not eligible for financial aid. However, it may be eligible for scholarship funding if the student is awarded scholarships.

Recommended Course Schedule

| 1st semester | | Units |
|-----------------------|---|----------|
| MPT 102 | Introduction to Programming for Mechatronics | 3 |
| MPT 104 | Introduction to IIoT, Networking and Data Analytics | 6 |
| Semester Total | | 9 |
| Total Units | | 9 |

Program Requirements

Skills Certificates provide training for entry-level positions or career advancement and are designed to prepare students to take state, national and/or industry-recognized certifications or licensing exams. Skills certificates are awarded upon completion of coursework and marked on a student's transcripts at the end of the semester (Students are unable to declare intent to complete a skills certificate.) Skills Certificates are not eligible for Financial Aid.

To earn a skills certificate, students must:

1. Maintain a minimum cumulative GPA of 2.0.
2. Have no financial or library obligation to the college.

| Code | Title | Units |
|---------------------------------|---|----------|
| CERTIFICATE REQUIREMENTS | | |
| MPT 102 | Introduction to Programming for Mechatronics | 3 |
| MPT 104 | Introduction to IIoT, Networking and Data Analytics | 6 |
| Total Units | | 9 |

Program Outcomes

Students completing the certificate will:

PSLO1: Use programmable components in manufacturing to collect data for extraction.

PSLO2: Utilize asset tracking devices and integrate them with related programmable instruction types