INDUSTRIAL 4.0 FUNDAMENTALS AND APPLICATIONS, SC

Program Description

The Skills Certificate, Industry 4.0 Fundamentals and Applications is the premise for the fourth industrial revolution; this premise states that rapid changes to automation processes will occur due to significantly greater interconnectedness of all components involved in manufacturing as well as the capability of drastically expanded data analytics that will allow for unforeseen predictive capacities in production and maintenance. This certificate is aimed at providing students entry to intermediate level familiarity with basic components and concepts involved in what is often referred to as smart automation.

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 110	Automated Production Concepts I	3
MPT 120	Automated Production Concepts II	3
MPT 140	Quality Control	3
	Semester Total	**9**
	Total Units	**9**

Program Requirements

Skills Certificates can consist of a single course or a short set of courses that provide training for entry-level positions or career advancement. These short-term certificates may also 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 cannot declare a skills certificate as one's major. 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 110	Automated Production Concepts I	3
MPT 120	Automated Production Concepts II	3
MPT 140	Quality Control	3
Total Units		**9**

Program Outcomes

Students completing the certificate will:

PSLO1: Define basic terms and concepts associated with industry 4.0.

PSLO2: Demonstrate the operation of Manufacturing Execution Systems (MES) and Human Machine Interfaces (HMI).

PSLO3: Demonstrate the operation of different Product ID tools

PSLO4: Describe the use of vision technology to determine defects of products.