INDUSTRIAL PROGRAMMING AND CONTROLS, SC

Program Description

This Skills Certificate, Industrial Programming and Controls will prepare students to interact with industry standard programmable equipment such as Programmable Logic Controllers (PLCs) and robotics as well as control logic common to programming languages and diagrams in industry. This background will allow students to readily interact with automated equipment and comprehend the underlying conditions by which a given process is guided.

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
ELM 127	Introduction to AC Controls	3
ELM 134	Programmable Logic Controllers I	3
ELM 240	Advanced Manufacturing and Robotic Systems	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		
ELM 127	Introduction to AC Controls	3
ELM 134	Programmable Logic Controllers I	3
ELM 240	Advanced Manufacturing and Robotic Systems	3
Total Units		**9**

Program Outcomes

Students completing the certificate will:

PSLO1: Program and troubleshoot PLCs.

PSLO2: Describe basic and advanced sensors and the range of their function in an automated environment.

PSLO3: Operate, program and troubleshoot a robot in an assembly environment.

PSLO4: Create, wire, and troubleshoot motor control diagrams that use control logic.