

CAREER STUDIES CERTIFICATE (221-706-96)

Advanced Technology in Mechatronics - Fundamentals

Purpose: This Career Studies Certificate in Advanced Technology in Mechatronics - Fundamentals combines the concepts and practices of mechanical and electrical processes in order to manipulate motorized, hydraulic and pneumatic machines to perform complex automated functions in an industrial or manufacturing setting for an entry-level position. Students may continue into the Technical Studies A.A.S. Mechatronics specialization degree.

Occupational Objective: Entry-level opportunities at automated manufacturing and computer-aided industrial sites. Positions include mechanical, maintenance, electrical, quality, computer, process, and manufacturing technicians.

Admission Requirements: Applicants must meet the general admission requirements for admission to the college. To be successful in this program, students must have demonstrated Math competency to be placed in Algebra I. Students not achieving this level will be required to take developmental courses or receive departmental approval.

CURRICULUM AND OTHER REQUIREMENTS

GENERAL EDUCATION CORE COURSE	CREDITS
ITE 115 Introduction to Computer Applications and Concepts	3

ADVANCED TECHNOLOGY AND OTHER RELATED COURSES

ELE 133-134* .. Practical Electricity I-II	6
ETR 123* Electronic Applications I	1
ETR 141* Electronics I	3
MEC 162 Applied Hydraulics and Pneumatics	3
Total Minimum Credits for Certificate	16

**This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.*

SUGGESTED SCHEDULE

FIRST YEAR	SPRING
FALL	ELE 134
ELE 133	ETR 123
ITE 115	ETR 141
	MEC 162