

ROBOTICS/MECHATRONICS CERTIFICATE

Robotics/Mechatronics - M716

CATALOG DESCRIPTION OF PROGRAM:

The Robotics/Mechatronics Certificate trains students to be robotics/automation /manufacturing/ mechatronics technicians who can maintain, program, troubleshoot, and repair robots and mechatronics systems in different applications. Students in this certificate program receive extensive training in robotics, mechatronics, computer controls, instrumentation, data acquisition, mechanical controls, pneumatics, electrical power, motors, and hydraulics.

COURSE	CURRENT SEQUENCE	CREDITS	PREREQUISITES	SEMESTER	GRADE
1st Semester					
PRE 100	Preparation for Academic Achievement	1	None		
RBT 105	Introduction to Robotics/Mechatronics	4	None		
SP 101	Fundamentals of Speech Communication	3	ENG 82 or RENG 92		
CLT 100	Computer Literacy	2	None		
Semester Credits		10			
2nd Semester					
ECO 201	The American Economy I: Macroeconomic Theory	3	ENG 82 or RENG 92		
RBT 150	Computer Assisted Manufacturing (CAM) and Industrial Instrumentation	4	RBT 105		
RBT 206	Robotics Applications and Programmable Logic controllers (PLCs) Lab	1	RBT 105		
Semester Credits		8			
PROGRAM TOTAL		18			

Advisor Signature: _____

Date: _____

Student Signature: _____

Date: _____

Pre-Requisites for Students in Developmental Courses

COURSE	CURRENT SEQUENCE	CREDITS	PREREQUISITES	SEMESTER	GRADE
RENG 90	Intensive Program Writing	4 hrs.	Placement Test		
RENG 91	Composition Skills I	4 hrs.	Placement Test or RENG 90		
RENG 92	Composition Skills II	4 hrs.	Placement Test or RENG 91		
MAT 80	Arithmetic	3 hrs.	Placement Test		
MAT 86/	Integrated Pre-Algebra and Introductory Algebra	5 hrs.	Placement Test or MAT 80		
MAT 87M	Integrated Elementary and Intermediate Algebra		Students who complete MAT 80 with an A or B within a one year period; Students who recently (within one year) failed and need to repeat MAT 91; students whose ACUPLACER placement score on Elementary Algebra falls within the range 52-62.		
MAT 91	Elementary Algebra	4 hrs.	Placement Test or MAT 80		
MAT 92	Intermediate Algebra	4 hrs.	Placement Test or MAT 91		