



## New Program Report

**Date Submitted:**

02/28/2023

**Institution**

St. Charles Community College

**Site Information**

**Implementation Date:**

8/13/2023 12:00:00 AM

**Added Site(s):**

**Selected Site(s):**

St. Charles Community College, 4601 Mid Rivers Mall Drive, St. Peters, MO, 63376

**CIP Information**

**CIP Code:**

150613

**CIP Description:**

A program that prepares individuals to apply basic engineering principles and technical skills to the identification and resolution of production problems in the manufacture of products. Includes instruction in machine operations, production line operations, engineering analysis, systems analysis, instrumentation, physical controls, automation, computer-aided manufacturing (CAM), manufacturing planning, quality control, and informational infrastructure.

**CIP Program Title:**

Manufacturing Engineering Technology/Technician

**Institution Program Title:**

Mechatronics Engineering Technology

**Degree Level/Type**

**Degree Level:**

Associate Degree

**Degree Type:**

Associate in Applied Science

**Options Added:**

Collaborative Program:

N

**Mode of Delivery**

Current Mode of Delivery

Classroom

**Student Preparation**

Special Admissions Procedure or Student Qualifications required:

Regular SCC Admissions requirements.



## New Program Report

Specific Population Characteristics to be served:  
n/a

### Faculty Characteristics

Special Requirements for Assignment of Teaching for this Degree/Certificate:  
Specialist knowledge or experience in Mechatronic related specialty areas.

Estimate Percentage of Credit Hours that will be assigned to full time faculty:  
Approximately 25% of program credit hours will be taught by full-time faculty. This is due to the nature of the specialty content that makes up this program.

Expectations for professional activities, special student contact, teaching/learning innovation:  
Faculty will be required to participate in all normal faculty professional development activities and abreast in current trends and certificates in specialty knowledge areas.

### Student Enrollment Projections Year One-Five

<b>Year 1</b>	<b>Full Time: 15</b>	<b>Part Time: 0</b>	
<b>Year 2</b>	<b>Full Time: 30</b>	<b>Part Time: 0</b>	
<b>Year 3</b>	<b>Full Time: 30</b>	<b>Part Time: 0</b>	<b>Number of Graduates: 15</b>
<b>Year 4</b>	<b>Full Time: 30</b>	<b>Part Time: 0</b>	
<b>Year 5</b>	<b>Full Time: 30</b>	<b>Part Time: 0</b>	<b>Number of Graduates: 15</b>

**Percentage Statement:**  
100.00

### Program Accreditation

Institutional Plans for Accreditation:  
SCC has already received HLC accreditation approval for this degree program.

### Program Structure

**Total Credits:**  
61

**Residency Requirements:**  
15 credit hours

**General Education Total Credits:**  
16

**Major Requirements Total Credits:**  
45

### Course(s) Added

COURSE NUMBER	CREDITS	COURSE TITLE
see attached	0	see attached

**Free Elective Credits:**  
0



## New Program Report

**Internship or other Capstone Experience:**

N/A

**Assurances**

I certify that the program is clearly within the institution's CBHE-approved mission. The proposed new program must be consistent with the institutional mission, as well as the principal planning priorities of the public institution, as set forth in the public institution's approved plan or plan update.

I certify that the program will be offered within the proposing institution's main campus or CBHE-approved off-site location.

I certify that the program will not unnecessarily duplicate an existing program of another Missouri institution in accordance with 6 CSR 10-4.010, subsection (9)(C) Submission of Academic Information, Data and New Programs.

I certify that the program will build upon existing programs and faculty expertise.

I certify that the program can be launched with minimal expense and falls within the institution's current operating budget.

I certify that the institution has conducted research on the feasibility of the proposal and it is likely the program will be successful. Institutions' decision to implement a program shall be based upon demand and/or need for the program in terms of meeting present and future needs of the locale, state, and nation based upon societal needs, and/or student needs.

**Contact Information**

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Miles

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# Mechatronics Engineering Technology AAS

Subject	Course	Title	Credits
<b>General Education Requirements (16 credits)</b>			
Mathematics	MAT-105	Applied Math	3
Communications	ENG-101 or ENG-102 or ENG-115	English Comp I English Comp II Technical Writing	3
	COM 101	Introduction to Communications	3
	HIS 101, 102, 103, 104, POL 101, POL 102	US History to 1877, US History Since 1877, African American History to 1877, African American History Since 1877	3
Natural Science	PHY-111	intro to Physical Science	3
Elective	COL 101	College Seminar	1
<b>Core Course Requirements (45 credits)</b>			
	MFG-132	Precision Tools & Measurement	3
	MFG-101	Principles of Safety	3
	CAD-103	CAD Systems I	3
	MEC-115	Machine Design	3
	ETC-101	Fundamentals of Electronics	3
	MEC-112	Pydraulic & Pneumatic	3
	MFG-201	Principles of Manufacturing Processes and Production	3
	MEC-108	Intro to Prog Logic Controller	3
	MEC-210	Robotics Theory, Maintenance & Application	3
	MFG-240	Basic Computer Integrated Manufacturing	3
	ETC-210	Industrial Electricity	3
	MFG-215	Problem Solving Tactics in Manufacturing	3
	MEC-220	Auto System Integration	3
	MEC-110	Motors & Controls	3
	MFG-111	Principles of Quality Practices	3
<b>Total Required Hours: 61 credits</b>			