

The Technical Certificate (T.C.) in Mechatronics focuses on broad, transferable skills and stresses understanding and demonstration of the elements of engineering technology.

The program focuses on maintenance techniques, computer aided drafting/design skills, technical communications, maintenance and operation of various industrial components, quality control and testing, material handling protocols, and proper usage of tools and instrumentation.

| <input checked="" type="checkbox"/> Task |
|--|
| <input type="checkbox"/> Explore career resources at fscj.edu/student-services/career-development . |
| <input type="checkbox"/> Meet with your advisor each term. |
| <input type="checkbox"/> Satisfy the technical certificate graduation requirements. |

Articulation

This certificate articulates directly into the Engineering Technology (Advanced Manufacturing (2320) (A.S.) degree. Contact an advisor to determine the career education path that is best for you.

Important for You to Know

This academic roadmap does not include **developmental education courses** in reading, writing, and/or mathematics that you may be required to take. Students who place into developmental education courses are required to complete designated developmental education courses with a grade of C or higher regardless of program of study. In addition, it does not include **MAT 1033: Intermediate Algebra**, which, for many students, is a prerequisite course for MAC 1105.

Advising

(904) 598-5618 or amt@fscj.edu.

Sample Roadmap

This roadmap provides general guidance about required courses. For specific guidance about your individual academic degree plan, please see an advisor. Also refer to the College Catalog and class schedules for additional information. A minimum grade of C or higher must be achieved in all professional courses.

Term 1

| <input checked="" type="checkbox"/> | Course: Course Title | Credit Hours | Terms Offered |
|-------------------------------------|--|--------------|---------------|
| <input type="checkbox"/> | ETS 1352C: Introduction to Manufacturing Processes | 3 | Fall, Summer |
| <input type="checkbox"/> | EET 1084C: Survey of Electronics | 3 | Fall, Summer |

Term 2

| <input checked="" type="checkbox"/> | Course: Course Title | Credit Hours | Terms Offered |
|-------------------------------------|--------------------------------------|--------------|---------------|
| <input type="checkbox"/> | ETS 1511C: Motors and Controls | 3 | Spring |
| <input type="checkbox"/> | ETS 1700C: Hydraulics and Pneumatics | 3 | Spring |

Term 3

| <input checked="" type="checkbox"/> | Course: Course Title | Credit Hours | Terms Offered |
|-------------------------------------|---|--------------|---------------|
| <input type="checkbox"/> | ETS 1603C: Robotics - Mechanics and Controls | 3 | Fall, Summer |
| <input type="checkbox"/> | ETS 1542C: Introduction to Programmable Logic Controllers | 3 | All |

Term 4

| <input checked="" type="checkbox"/> | Course: Course Title | Credit Hours | Terms Offered |
|-------------------------------------|---|--------------|---------------|
| <input type="checkbox"/> | ETM 2315C: Mechanical Devices and Systems | 3 | Fall |
| <input type="checkbox"/> | BCN 2732: OSHA Safety | 3 | All |

Term 5

| <input checked="" type="checkbox"/> | Course: Course Title | Credit Hours | Terms Offered |
|-------------------------------------|---|--------------|---------------|
| <input type="checkbox"/> | ETD 1100C: Engineering Drawing | 3 | All |
| <input type="checkbox"/> | ETS 2527C: Electromechanical Components and Mechanism | 3 | Spring |

Total Program Credit Hours

The **Mechatronics** T.C. program requires a **minimum of 30 credit hours**. Total program hours may vary based on the student's individual degree plan. Please see an advisor for individual guidance. This program **is eligible** for financial aid.

Program Learning Outcomes

Upon completing this program, students will be able to demonstrate proficiency in the following program learning outcomes:

- Students will learn the mechanics, controls, and programmable logic controllers
- Students will get information about robotics, devices and systems
- Students will use robots