

About the Program

The Technical Certificate (T.C.) in Pneumatics, Hydraulics and Motors for Manufacturing focuses on motor and controls, hydraulics, mechanical systems, and drive and pumps.

This program requires a **minimum of 12 credit hours**. Total program hours may vary based on the student's individual academic degree plan. This program **is not eligible** for financial aid.

Program Requirements

Students must fulfill all requirements outlined in the college catalog.

Important for You to Know

This academic roadmap does not include developmental education courses in reading, writing, and/or mathematics or other prerequisite courses that you may be required to take. In addition, it does not include technical certificate graduation requirements.

Students in this certificate program **are not required** to complete math courses unless they are listed as part of the certificate program. This certificate articulates directly into the Engineering Technology (Advanced Manufacturing (2320) (A.S.) degree, which includes an **Algebra Through Calculus math pathway**. This pathway is intended for students whose academic program requires a foundation of algebra, followed by a sequence of courses that may lead to calculus.

Additional Information

- ⇒ **Program Information**, including advisor contact details: <https://www.fscj.edu/6043>.
- ⇒ **Technical Certificate Information**, including graduation requirements: <https://catalog.fscj.edu/academics/degree-certificate-programs/technical-certificates>.
- ⇒ **Program Requirements**: <https://catalog.fscj.edu/programs/6043>.
- ⇒ **Math Pathways Information**: <https://catalog.fscj.edu/academics/math-pathways>.

Sample Roadmap

This sample roadmap shows one possible pathway to program completion and may not be appropriate for all students.

Prior to enrolling in classes, please **meet with an advisor** for specific guidance about your individual academic plan. Some courses are offered only once per year; advising is critical for course progression.

Term 1

Course	Credits
ETM 2315C - Mechanical Devices and Systems	3
ETM 2317C - Drive and Pump Systems	3

Term 2

Course	Credits
ETS 1511C - Motors and Controls	3
ETS 1700C - Hydraulics and Pneumatics	3