

San José City College
Associate in Science Degree
2020-2021

FACILITIES MAINTENANCE TECHNOLOGY

San José City College offers a certificate and an Associate in Science (AS) in Facilities Maintenance Technology. The Facilities Maintenance Technology Program will provide students with the skills to begin or advance in a career in facilities maintenance. It was designed by the advisory committee to meet industry requirements. Students will learn the skills and concepts necessary to install, operate, maintain and repair control, piping, and mechanical systems in large commercial, medical, institutional, and industrial buildings. Students will also learn trouble shooting skills, problem solving methods and electrical concepts. Continuous improvement techniques and effective written, verbal, and electronic communication skills will be stressed across the curriculum. Classes are designed in lecture and lecture/lab format to give students a solid foundation in general maintenance skills including HVAC/R. A grade of “C” or better is required for all major and certificate courses.

Upon completion of the program, students will be able to:

- Recognize the main Mechanical, Hydronic, Electrical, Controls and HVAC equipment associated with large Commercial Buildings. Perform in a safe and efficient manner Technical Maintenance duties associated with the operation of Commercial Buildings.
- Competence in analyzing, maintaining and servicing sophisticated Commercial Building equipment. Use sound judgment to execute competent repairs to Commercial Buildings.
- Ability to interpret and process Wiring Diagrams, Logic Control Diagrams and Pipe Diagrams. Demonstrate proficiency in writing service reports in both hard and soft copy. Ability to verbally communicate with Building Owners and Management.
- Competence and skills in performing retrofits to existing Control Systems. Integrating leading edge technology to enhance smooth efficient Facilities Maintenance Management.
- Demonstrate the ability to work as an individual and in groups of all social and economic backgrounds. Demonstrate awareness of Global Warming, Green House Gases Effect and Ozone Depletion as related to use of common Refrigerants. Demonstrate efficient use of Water and other natural resources.
- Demonstrate honesty and integrity when dealing with Building Owners, Building Managers, and Building occupants. Exercise professional courtesy in the workplace.
- Recognize proper attire and etiquettes expected of Professional Building Services Technicians. Perform Building Maintenance procedures that are safe and aesthetically acceptable.

CAREER OPTIONS:

- Building Maintenance Supervisor
- Building Operations Manager
- Facilities Manager
- Maintenance Operator

FOR ADDITIONAL INFORMATION, SEE A COUNSELOR, VISIT THE CAREER/TRANSFER CENTER, OR CONTACT THE FOLLOWING:

Faculty: Johnathan Cronan, jonathan.cronan@sjcc.edu

(408) 298-2181ext. 3667

Business and Workforce Development Division

(408) 288-3131

San José City College Web Page

www.sjcc.edu

Facilities Maintenance Technology

MAJOR REQUIREMENTS:

			<u>UNITS</u>
AIRC	121	Air Conditioning Principles	4
AIRC	122	Refrigeration Principles	4
AIRC	131	Intermediate Air Conditioning	4.5
AIRC	138	Air Conditioning Work Experience	2
AIRC	142	Air Conditioning Control Systems	4
FMT	100	Introduction to Facilities Maintenance	3.5
FMT	104	Electrical Concepts for Facilities Maintenance Technicians	2.5
FMT	105	Introduction to Industrial Electronics and Controls	2.5
FMT	120	Low and High Pressure Boilers	3
FMT	122	Introduction to Programmable Logic Controllers	4
FMT	123	Intermediate Programmable Logic Controllers	4

Plus one of the following courses:

AIRC 145 Sheet Metal Principles
2

OR -

FMT 130 Management of People in the Technical and Building Services Industries
2

MAJOR REQUIREMENTS	40
GENERAL EDUCATION REQUIREMENTS	24
PHYSICAL ACTIVITY	<u>1</u>
TOTAL REQUIRED UNITS	65