

San José City College
Certificate of Achievement
Level 2
2021-2022

AIR CONDITIONING and REFRIGERATION TECHNOLOGY

San José City College offers two certificates in Air Conditioning/Refrigeration Technology. This program is designed to develop the appreciation, knowledge, and skills essential for employment in the air conditioning and refrigeration industry. Instruction includes both theory and practical work with refrigeration and air conditioning machinery, electrical equipment, and related mathematics.

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

- Recognize the components that constitute Residential and Commercial Air Conditioning and Refrigeration systems. Perform Maintenance and Repair on complex Air Conditioning and Refrigeration systems.
- Competence in analyzing, maintaining, servicing and commissioning Air Conditioning and Refrigeration systems. Problem solve and troubleshoot complex Air Conditioning and Refrigeration systems using analytical and methodical practices.
- Ability to interpret and process Wiring Diagrams and Pipe Diagrams. Demonstrate proficiency in writing service reports in both hard and soft copy.
- Competence and skill in maintaining energy efficient Air Conditioning and Refrigeration equipment. Recognize and be capable of implementing modern technologies so as to maintain proper and efficient functionality of Air Conditioning and Refrigeration systems
- 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 honesty and integrity when dealing with customers and employers. Exercise professional courtesies in the workplace.
- Recognize proper attire and etiquettes expected of Professional Air Conditioning and Refrigeration Technicians and Engineers. Perform Mechanical and Electrical installations of Air Conditioning and Refrigeration systems that are both safe and aesthetically pleasing.

CAREERS OPTIONS:

Refrigeration Technician
 Air Conditioning Technician
 Facilities Technician
 Estimator
 Counter Sales

RELATED OCCUPATIONS:

Stationery Engineer
 Sheet Metal Technician
 Plumber and Pipe Fitter
 Electrician
 Facilities Maintenance Technician

All major courses must be completed with a grade of "C" or better.

CERTIFICATE OF ACHIEVEMENT - LEVEL 2:

UNITS

AIRC	121	Air Conditioning Principles	4
AIRC	122	Refrigeration Principles	4
AIRC	131	Intermediate Air Conditioning	4.5
AIRC	132	Refrigeration Service	4.5
FMT	100	Introduction to Facilities Maintenance	<u>3</u>
TOTAL UNITS			20.5

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

Business and Workforce Development Division
 San José City College Web Page

(408) 288-3131
www.sjcc.edu

Prepared by the SJCC Articulation Office and is subject to change without notice. This major sheet should be used for advisory purposes only. See a counselor for assistance in preparing your individual course plan. It is ultimately the individual student's responsibility to ensure that all requirements are met.