PROGRAM DESCRIPTION:
This entry-level certificate introduces students to the basics of HVACR: heating, cooling, air distribution systems, basic copper and piping practices, soldering and brazing, and basic carbon steel practices. This certificate will provide successful students the skills to become an entry-level assistant in the field of Heating, Ventilation, Air Conditioning and Refrigeration.

HOW DO I KNOW THIS MAJOR IS FOR ME?
- You are organized, detail-orientated, and like to solve problems
- You enjoy servicing, repairing, adjusting and testing equipment
- You like to conduct tests and inspections of products, services or processes
- You enjoy working with people
- You enjoy setting goals and deadlines
- You can carefully maintain records of work performed
- You like to use math to calculate project numbers

WHAT CAN I DO WITH THIS CERTIFICATE AND/OR ASSOCIATE DEGREE?
- Refrigeration Mechanic
- Air Conditioning Installer
- Control and Valve Installer
- Service Technician
- Electrician
- Maintenance Worker
- Wind Turbine Technician
- School HVAC Tech
- Welder
- Plant Technician
- Solar Installer
- Boilermaker

WHERE CAN I WORK?
This pathway provides you with a choice of various work environments including:
- Manufacturing
- Construction
- Retail Centers
- Distribution Centers
- School Campuses
- Sports Facilities
- Food and Beverage Companies
- Local and Federal Government
- Oil, Gas, Electric Companies
- Transportation
- Hydroelectric Plants
- Wholesale Trade
- Plumbing Contractors
- Self-Employment
- Hospital Facilities

WHAT IS THE POTENTIAL WAGE OUTLOOK?
The Certificate and/or Associate Degree may lead to a position as a Heating, Air Conditioning, and Refrigeration Mechanic, which according to the EDD/LMID Occupational Employment Statistics Survey, 2017 the median wage in California was $56,350 annually or $27.09 per hour. For more information, visit www.labormarketinfo.edd.ca.gov/OccGuides.

The job and wage outlook will vary based on the position selected within this major. To review current salary information and job outlook for other occupational titles, visit www.onetonline.org.

WHAT CAN I DO IN THE FUTURE WITH MORE EDUCATION?
The positions below require at least a bachelor’s degree in Electrical Engineering. According to O*NetOnline, the median salary in 2017 for an Electrical Engineer was $97,970. You can complete the Engineering/Engineering Technology for Transfer Associate Degree at Chaffey to follow this pathway.
- Electrical Engineer
- Industrial Engineer
- Manufacturing Engineer
- Production Director
- Energy Engineer
- Logistics Analyst
- Robotics Engineer
- Environmental Engineer

For additional information about career pathways and to find out if this major is a good fit for you visit the Career Center located in MACC 203. Career information was collected from www.onetonline.org and www.bls.gov.
### MAJOR AND COURSE REQUIREMENTS:

**LEGEND:** G=Grade  IP=In Progress  N=Need  **Bold: Prerequisites**  Plain Text: No Prerequisites

<table>
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<tr>
<th>Requirements for the HVACR Certificate: (0025)</th>
<th>Grade</th>
<th>IP</th>
<th>Need</th>
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COUNSELOR NOTES:

$46 per unit for CA Residents