



AZ HIGH TECH FUTURES

HVAC-R

Programs available at: GateWay



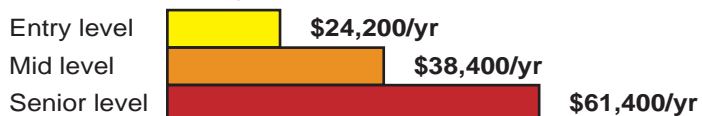
What can I do in HVAC-R?

Heating, Ventilation, Air Conditioning - Refrigeration requires technicians to control the temperature, humidity, and the total air quality in residential, commercial, industrial, and other buildings. HVAC-R technicians control air conditioning systems, particle-free clean rooms, sensitive controllers, and even high-voltage electrical systems. Many of the skills gained in this career are transferrable to other industries.

Day in the Life

Your coworkers are counting on you to cool the place down: new machines on the factory floor run really hot. Your team spends all day adjusting air flow, humidity, and coolant levels. You take readings, adjust monitors, and program controllers to bring the temperature back to normal.

Show me the Money



Students in our courses will learn skills that are aligned with industry standards. Students will learn how to:

- Maintain, troubleshoot, and repair systems for industrial Heating, Ventilation, Air Conditioning - Refrigeration (HVAC-R)
- Install components such as fans, tanks, pumps, ducts, piping, evaporators, gauges, and compressors
- Design, diagram, wire, test and troubleshoot electrical circuits
- Determine the cooling or heat required to keep a building within temperature specifications
- Program, calibrate, and operate mechanical, digital, and electronic controls
- Determine air flow, fluid flow, temperature, humidity, pressure and constant variable volume

LUCY SANDOVAL – BUILDING EQUIPMENT OPERATOR – CITY OF PHOENIX

"I was a single mom with 2 kids, and my air conditioning broke, they charged me \$1000 to change the compressor, which was still under warranty. So I figured I better learn how to fix it myself – I always liked working with my hands."

Lucy completed the 4-year HVAC-R apprenticeship program at a Maricopa Community College, sponsored by the City of Phoenix, in just 2½ years while working as a Journeyman at Phoenix Sky Harbor Airport. Upon graduation she was promoted to Building Equipment Operator. "It's always something different – It's very challenging – we have to stay on top of all that is going on."

Lucy plans to return to Maricopa to specialize in Johnson Controls for HVAC-R. "They have the best program as far as controls go – so if I want to learn more about how to maintain this airport - That is the place to go!"



PURSUE YOUR HIGH TECH FUTURE THROUGH MARICOPA COMMUNITY COLLEGES!

AZ HIGH TECH FUTURES



PURSUE YOUR HEATING, VENTILATION, AIR CONDITIONING-REFRIGERATION FUTURE THROUGH MARICOPA COMMUNITY COLLEGES!

GateWay Community College

Associate of Applied Science (AAS) in:

- Air Conditioning, Refrigeration, Facilities (70 credits)
- Mechanical Trades: Heating, Ventilating, and Air Conditioning (60 credits)

Certificate of Completion (CCL) in:

- Air Conditioning, Refrigeration, Facilities (48 credits)
- Mechanical Trades: Heating, Ventilating, and Air Conditioning (30 credits)

PURSUE YOUR HIGH TECH FUTURE THROUGH MARICOPA COMMUNITY COLLEGES!

Whether you're just out of high school, going back to college, or seeking to upgrade your job skills, the Maricopa Community Colleges offer a wide range of opportunities. Our 10 colleges and 2 skill centers are dedicated to excellence, meeting your educational needs with affordable, convenient classes.

Learn more at www.azhightech.com

- Chandler-Gilbert
- Estrella Mountain
- GateWay
- Glendale
- Maricopa Skill Center
- Mesa
- Paradise Valley
- Phoenix
- Rio Salado
- Scottsdale
- South Mountain
- Southwest Skill Center



HTWI is an initiative of the Division of Academic and Student Affairs at the Maricopa Community Colleges.



HTWI
HIGH TECH WORKFORCE INITIATIVE



Funded, in part, by a grant from the National Science Foundation. DUE 0603379