

Career Focus on...

HVAC

Introduction

- Are you mechanically inclined?
- Do you like diagnosing and solving mechanical problems?
- Would you like to work primarily on your own?
- Do you have good communication skills?

If you answered “yes” to these questions, you may want to consider a career in Heating, Ventilation, and Air Conditioning (HVAC).

Did You Know... ?

- Employment of heating, air-conditioning, and refrigeration mechanics and installers is projected to increase 34% between 2010 and 2020. This is much faster than the national average growth rate for all industries.
- Heating, air-conditioning, and refrigeration mechanics and installers install and maintain systems that control the temperature, humidity, and total air quality in residential, commercial, industrial, and other buildings.
- Concern for the environment and the need to reduce energy consumption overall has prompted the development of new energy-saving heating and air-conditioning systems. This emphasis on better energy management is expected to lead to the replacement of older systems and the installation of newer, more efficient systems in existing homes and buildings.

HVAC @ QCC*

The QCC HVAC Certificate program will provide successful graduates with the skills needed to enter the HVAC field as an entry level technician who can install, maintain and repair a wide variety of HVAC equipment. Graduates will also possess the knowledge, skills and abilities that will ensure the safe and energy-efficient operation of HVAC equipment.

Upon completion of the program graduates will be able to:

- Solder, Braze, and Flare copper tubing
- Safely wire and install electrical circuits
- Use electrical meters to make electrical measurements
- Understand and interpret wiring schematics
- Troubleshoot electrical problems
- Evacuate, charge and recover refrigerant from Air Conditioning and Refrigeration systems
- Troubleshoot Air Conditioning and Refrigeration systems
- Troubleshoot Heating systems

*This program is offered at QCC at Assabet Valley only

Career Options

HVAC TECHNICIAN

Median Annual Salary: \$39,700
Recommended Education: High School diploma or G.E.D. with HVAC/R training
www.bls.gov/oco/ocos192.htm

STATIONARY ENGINEER

Median Annual Salary: \$49,790
Recommended Education: High School diploma or G.E.D. with vocational training
www.bls.gov/oco/ocos228.htm

Worcester Area Employers

- ABM Building Solutions
- Alpine Mechanical Services, LLC
- Automated Building Systems, Inc.
- Colwen Hotel Management
- Electronic Environments Corporation
- Johnson Controls
- Lorden Oil Co
- Quinsigamond Community College
- Nypro Corp
- Renaud HVAC and Controls, Inc.
- Service Solutions Group
- TAG Heating & Cooling

Professional Associations

- National Association of Power Engineers:
www.napenational.org
- Air-Conditioning Contractors of America:
www.acca.org
- Green Mechanical Council: www.greenmech.org
- HVAC Excellence:
www.hvacexcellence.org
- Mechanical Contractors Association of America:
www.mcaa.org
- National Center for Construction Education and Research:
www.nccer.org
- ASHRAE:
www.ashrae.org
- International Institute of Refrigeration (IIR):
www.iifir.org
- Refrigeration Service Engineers Society (RSES):
www.rses.org

Next Steps

Wondering if HVAC is right for you?

- Take a Career Assessment to match your interests with potential careers:
www.qcc.mass.edu/t3/ort/sites.html#careerassess
- Research the web links on this *Career Focus* page, as well as links suggested online under Career Information: www.qcc.mass.edu/t3/ort/sites.html#careerinfo
- Conduct an Informational Interview with someone employed in the field. For more information on how to do this, review the Informational Interview links online:
www.qcc.mass.edu/t3/ort/sites.html#infointerview
- Attend a Career Planning Session. For more information, and the current schedule, visit Career Academic Personal Success (CAPS) online:
www.QCC.edu/services/academic-advising/career-academic-personal-success
- Speak with an Advisor:
www2.qcc.mass.edu/advising/
- Speak with QCC Faculty who teach HVAC/R courses.

Sources Used

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2010-11 Edition*:

- Heating, Air-conditioning, and Refrigeration Mechanics and Installers:
www.bls.gov/ocolocos192.htm
- Stationary Engineers and Boiler Operators:
www.bls.gov/ocolocos228.htm

Quinsigamond Community College, Online Course Catalog:

- Heating, Ventilation, and Air Conditioning -- Certificate
<http://www.qcc.edu/academics/technology/heating-ventilation-air-conditioning>

Employment, co-op, internship, or service learning opportunities?

Contact the Career Placement Office:
www.QCC.edu/pages/Career_Placement.html

Possible Transfer Schools

- Assumption College
- Fitchburg State University
- Northeastern University
- UMass Amherst
- UMass Lowell
- Westfield State University
- Worcester State University

Specific Transfer Information?

- Start at the QCC Transfer web site:
www.qcc.mass.edu/transfer
- Make an appointment online with the Transfer Advisor:
www.qcc.mass.edu/transfer/calendar
- Email questions to:
transfer@qcc.mass.edu

Quinsigamond Community College is part of the Massachusetts Community Colleges and Workforce Development Transformation Agenda, which brings together Massachusetts' 15 community colleges, the Commonwealth's adult basic education and workforce development systems, career centers and industry stakeholders to change the way education and skills training are delivered and to prepare dislocated and under-skilled workers for the emerging, knowledge-based economy. As part of the initiative, Quinsigamond Community College supports students along efficient career pathways by helping them attain degrees, certificates and industry recognized credentials through accelerated programs linked closely to industry need. The statewide initiative is supported by a \$20 million, three-year grant from the United States Department of Labor, Employment & Training Administration TAACCCT. Grant Agreement #TC-22505-11-60-A-25.