

Occupational Profile



Heating & AC Mechanics

WHAT THEY DO

Installs, services, and repairs heating and air conditioning systems in residences and commercial buildings. Belongs to the Architecture and Construction cluster and Construction pathway.

Basic Skills:

- Reading Comprehension
- Active Listening
- Writing
- Speaking
- Mathematics
- Science
- Critical Thinking
- Active Learning
- Learning Strategies
- Monitoring

SKILLS YOU NEED

Transferable Skills (applicable in other careers):

High level

- Observing and diagnosing mechanical problems
- Repairing mechanical objects

Medium level

- Explaining electrical/electronic operations and problems
- Following manufacturing blueprints and diagrams
- Repairing large fixed structures and objects
- Using mechanics hand and power tools

Workplace Skills:

Medium level

- Complex Problem Solving
- Equipment Maintenance
- Equipment Selection
- Installation
- Instructing
- Negotiation
- Operation Monitoring
- Persuasion
- Quality Control Analysis
- Repairing
- Service Orientation
- Social Perceptiveness
- Systems Analysis
- Systems Evaluation
- Time Management
- Troubleshooting



Additional skills for this occupation may be found at <http://www.iowaworkforcedevelopment.gov/career-exploration-resources>

IS THIS FOR YOU?

Work Interests are described in the following categories (compatible with Holland's Model) by people who tend to succeed in this career:

- **Realistic** – You are a "doer". You like physical activities and projects. You like to find the answers to problems by doing hands-on work instead of talking about solutions.
- **Conventional**—You are an "organizer". Keeping things neat and organized is important to you. You like working with charts and reports, and work well with power and authority.
- **Investigative**—You are a "thinker". When you have a problem, you like to analyze it and look at different ways to solve it. You like to work by yourself, and you don't like explaining your ideas to other people.

Work Values are aspects of work that are satisfying to you. The following work values are generally associated with this career.

- **Working Conditions**—It's very important to you that your work satisfies your needs in areas like salary, job security and your working style preferences, such as working alone, staying busy all the time or having variety in your work tasks.
- **Support** – It's very important to you to know the company stands behind its workers and has competent, considerate and fair management.

Aptitudes reflect a person's ability to acquire skills and knowledge. The following aptitudes are important for success in the career:

- **General Learning Ability**
- **Spatial Perception**
- **Form Perception**
- **Clerical Perception**
- **Finger Dexterity**
- **Manual Dexterity**

ESTIMATED & PROJECTED EMPLOYMENT

Occupational Title	2012 Estimated Employment	2022 Projected Employment	2012-22 Employment Change	Annual Growth Rate (%)	Total Annual Openings
Total, All Occupations	1,758,205	1,955,480	197,275	1.1	61,665
Installation, Maintenance, & Repair Occupations	68,585	76,810	8,225	1.2	2,420
Heating, A C, & Refrigeration Mechanics & Installers	3,235	4,015	775	2.4	160

Source: <http://www.iowaworkforcedevelopment.gov/occupational-projections-0>

2015 WAGE & SALARY (\$)

Occupational Title	Average Wage	Average Salary	Entry Wage	Entry Salary	Experienced Wage	Experienced Salary
Total, All Occupations	19.77	41,122	9.55	19,858	24.88	51,755
Installation, Maintenance, & Repair Occupations	20.43	42,500	13.17	27,387	24.07	50,056
Heating, A C, & Refrigeration Mechanics & Installers	23.32	48,511	15.61	32,476	27.18	56,528

Source: <http://www.iowaworkforcedevelopment.gov/occupational-projections-0>

EDUCATION & TRAINING

Education	Work Experience	Job Training
Postsecondary	None	Long-Term On-The-Job

Because of the increasing sophistication of heating and air-conditioning systems, employers prefer to hire those with technical school or apprenticeship training. Some mechanics and installers, however, still learn the trade informally on the job. Many secondary and post-secondary technical and trade schools, junior and community colleges, and the Armed Forces offer six-month to two-year programs in heating and air-conditioning. Formal apprenticeship programs normally last three to five years and combine on-the-job training with classroom instruction. Applicants for these programs must have a high school diploma or equivalent. Approved apprenticeship programs/sponsors in Iowa can be found at http://access.bridges.com/ext/cp/custom_state_data/iowa_apprenticeship/4990210.htm

Source: <http://www.iowaworkforcedevelopment.gov/occupational-projections-0> and <https://secure.ihaveaplaniowa.gov/>

NATIONAL CAREER READINESS CERTIFICATE (NCRC)

Skill	Median Skill Level
Applied Mathematics	4
Locating Information	4
Reading for Information	5

This ACT-developed credential demonstrates achievement and a certain level of workplace employability skills. The greater the score, the greater the skill level (Bronze = 3, Silver = 4, Gold = 5, Platinum = 6).

Source: <http://www.act.org/workkeys/analysis/occup.html>

PRIMARY INDUSTRY SECTORS

(Where are Heating & AC Mechanics Employed?)

Specialty Trade Contractors
Self Employed
Merchant Wholesalers
Repair & Maintenance
Government

Source: <http://www.iowaworkforcedevelopment.gov/occupational-projections-0>

ADDITIONAL SOURCES:

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