THE CAREER

People are continually seeking ways to make their environment more comfortable and improve energy efficiency. Today’s heating, ventilation and air-conditioning systems control the temperature, humidity and the total air quality in residential, commercial, industrial and other buildings. Refrigeration systems make it possible to store and transport food, medicine and other perishable items.

Heating, ventilation, air-conditioning and refrigeration (HVAC/R) mechanics and installers—also called technicians—set-up, maintain and repair such systems. These professionals are currently in demand as the industry is experiencing faster than average job growth, per the U.S. Bureau of Labor Statistics.

PROFESSIONAL TRAITS

Those pursuing a career in this field should:

• Be able to identify, troubleshoot and resolve related mechanical issues
• Have a basic understanding of electricity
• Possess solid customer service skills
• Be punctual and reliable
• Have good hand-eye coordination and pay close attention to details
• Be in good physical condition

EMPLOYMENT AND SALARY INFORMATION

Median annual earnings of heating, air-conditioning and refrigeration mechanics and installers were $43,640 in May 2012, according to the U.S. Bureau of Labor Statistics. Salaries ranged from below $27,330 (lowest 10 percent) to more than $68,990 (top 10 percent).

Median yearly wages in the industries employing the largest numbers of these technicians were:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Median Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Equipment Contractors</td>
<td>$44,700</td>
</tr>
<tr>
<td>Commercial and Industrial Machinery and Equipment Repair</td>
<td>$47,120</td>
</tr>
<tr>
<td>Direct Selling Establishments</td>
<td>$46,670</td>
</tr>
<tr>
<td>Hardware, Plumbing and Heating Equipment Wholesalers</td>
<td>$50,930</td>
</tr>
</tbody>
</table>

THE PROGRAM

East Central College HVAC/R program seeks to empower graduates who hold the certificate or associate of applied science degree to be the top hiring candidates among regional employers. To this end, experienced faculty offer high-quality, hands-on instruction to students using the most current methods, equipment and systems.

ECC’s program includes air conditioning, ventilation, heating and refrigeration theory, and the design and construction of the equipment. Students also learn the basics of set-up, maintenance and repair.

HVAC/R students have several schedule options including day or evening classes, and a full-time or part-time schedule. Assuming appropriate placement scores, a full-time student can expect to complete the certificate track in 18 months.

Interested candidates should contact the program coordinator for more information and advisement.

ADMISSIONS REQUIREMENTS

Students must have completed:

✓ High school diploma or the equivalent (documentation must be sent to the registration office)
✓ Application for admission
✓ A placement test as specified by the college (some coursework requires minimum placement results)

ADDITIONAL PROGRAM INFORMATION

<table>
<thead>
<tr>
<th>Standard Occupational Classification (SOC)</th>
<th>49-9021.01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Placement Rate</td>
<td>29 percent</td>
</tr>
<tr>
<td>Tuition and Required Fees</td>
<td>$3,854 (In-District); $5,125 (Out-of-District)</td>
</tr>
<tr>
<td>Books and Supplies</td>
<td>$1,190.75</td>
</tr>
<tr>
<td>Other Fees and Expenses</td>
<td>$300</td>
</tr>
</tbody>
</table>

East Central College is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools

30 N. LaSalle St., Suite 2400
Chicago, Illinois 60602-2504
800-621-7440

Rolla  573-458-0165
Sullivan  573-468-8287
Union  636-584-6588
Warrenton  636-584-6588
Washington  636-239-0598

www.eastcentral.edu
# Certificate of Achievement Coursework

**Course** | **Hours**
--- | ---
AI 1335 Forced Air Heating/AC Systems & Controls Lecture | 5
AI 1343 Forced Air Heating/AC Systems & Controls Lab | 3
AI 1455 Heating Equipment Service & Installation Lecture | 5
AI 1463 Heating Equipment Service & Installation Lab | 3
AI 1085 Refrigeration, Components, & Electrical Fundamentals Lecture | 5
AI 1093 Refrigeration, Components, & Electrical Fundamentals Lab | 3
AI 1215 Refrigerants, A/C Installation, Testing & Troubleshooting Lecture | 5
AI 1223 Refrigerants, A/C Installation, Testing & Troubleshooting Lab | 3
AI 1710 Refrigeration Recovery/EPA Cert. | 0.5
AI 1720 Refrigeration Safety Cert.- R410A | 0.5
AI 2991 Customer Service & Employ Skills | 1.5
EM 1030 Heartsaver First Aid | 0.5
Program Elective | 3
Program Elective | 3

**Total Credit Hours** | **41**

# To Convert a Certificate of Achievement into an Associate of Applied Science Degree, Students Also Need to Take the Following:

**Course** | **Hours**
--- | ---
FS 1000 Campus Orientation/FS 1001 Foundation Seminar | 1
EN 1223 English Comp I or EN 1233 Honors English Comp I | 3
PE Requirement | 1
EN 1403 Technical Writing | 3
Mathematics Requirement | 3
HI 1000/PS 1000 Constitutions Study Module | 0
History or Pol. Science Requirement | 3
Communications Requirement | 3
Science Requirement | 3
Required Elective (BU or CS) | 3

**Total Credit Hours** | **23**

---

East Central College does not discriminate on the basis of race, color, religion, national origin, ancestry, gender, sexual orientation, age, disability, genetic information or veteran status. Inquiries/concerns regarding civil rights compliance as it relates to student programs and services may be directed to the Vice President of Student Development, 131 Buescher Hall, 1964 Prairie Dell Road, Union, Missouri 63084, (636) 584-6565 or stnotice@eastcentral.edu.