

# HVAC/R

(HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION) Associate of Applied Science

#### **East Central College**

#### **Admissions Office**

#### **Division**

#### **Program Faculty**

East Central College is accredited by the Higher Learning Commission and a participant in the Academic Quality Improvement Program (AQIP) 30 N. LaSalle St., Suite 2400

Chicago, Illinois 60602-2504 1 (800) 621-7440

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 & SALARY INFORMATION**

Median annual earnings of heating, air-conditioning and refrigeration mechanics and installers were \$42,530 in May 2010, according to the U.S. Bureau of Labor Statistics. Salaries ranged from below \$26,490 (lowest 10 percent) to more than \$66,930 (top 10 percent).

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

**Building Equipment Contractors** \$40,630 Commercial and Industrial Machinery and Equipment Repair \$43,460 **Direct Selling Establishments** \$44,210 Hardware, Plumbing and Heating Equipment Wholesalers \$46,540

#### THE PROGRAM

The goal of the East Central College HVAC/R Program is to empower graduates who hold this 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.

The two-year degree plan 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. This training prepares them to enter the workforce as HVAC/R technicians upon graduation.

ECC students have the choice of two tracks of study including day or evening classes, and a full-time or part-time schedule. They are encouraged to contact the program coordinator for more information and advisement.

## Admissions Requirements

Students must have completed:

- √ High school diploma or the equivalent (documentation sent to the registration office)
- ✓ Application for admission
- ✓ A placement test as specified by the college (some courses require minimum placement results)

### Transfer Options

The AAS degree is designed for students seeking employment immediately upon graduation. However, many of the credits, particularly the general education electives received with this degree, may qualify as transfer credit at four-year schools.

These decisions are made solely by the bachelor degree-granting institution, not East Central. Students seeking to transfer are advised to contact the institution of their choice before beginning a program or reviewing other degrees and coursework offered through ECC.













#### PROGRAM OF STUDY

AAS Program: 61-62 credit hours

This program of study is for a full-time student; part-time study is also available. Please contact an academic advisor for full course options. All academic schedules are subject to change. For the most current schedule, or to view the Certificate Program, visit www.eastcentral.edu.

# YEAR 1

# FALL SEMESTER

Course		Hours
FS 1000 FS 1001	Campus Orientation/ Foundation Seminar <sup>CA</sup>	1
HVC 1004	Introduction to Heating and Cooling CA	4
HVC 1011	Refrigerant Recovery/EPA Certification <sup>CA</sup>	1
HVC 1104	Refrigerant A/C Installation <sup>CA</sup>	4
HVC 1204	Forced Air Heating I <sup>CA</sup>	4
HVC 1304	Heating and Equipment Installation CA	4
	<b>Total Hours</b>	18

## **SPRING SEMESTER**

Course		Hours
HVC 1443	Energy Audit and Green Technology <sup>CA</sup>	3
HVC 2104	Refrigerant A/C Installation II	4
HVC 2204	Forced Air Heating II	4
HVC 2304	Heating and Equipment Installation II	4
	Total Hours	15

## **OTHER PROGRAM OPTIONS:**

HVC 1551 HVAC Internship

# YEAR 2

# FALL SEMESTER

Course	Но	URS
EN 1223 EN 1233	English Comp I or Honors English Comp I <sup>CA</sup>	3
HI 1000 PS 1000	Constitutions Study Module	0
	History or Pol. Science Requirement	3
	Mathematics Requirement (MT 1303 or higher) CA	3
	Elective (CS or BU)	3
	Communications Elective	3
	Total Hours	15

## **SPRING SEMESTER**

Course	!	Hours
EN 1403	Technical Writing	3
HVC 2404	Commercial Chilled Water Application	4
HVC 2553	HVAC Capstone I - (Customer Service/Employee Skills & EM 1030 Heartsaver First Aid )	3
HVC 2000	HVAC/R Assesment	0
	Science Requirement w/o lab	3
	<b>Total Hours</b>	13

CA Courses are part of the Certificate of Achievement

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