



EAST CENTRAL COLLEGE HVAC/R

HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION

CERTIFICATE OF ACHIEVEMENT

Catalog Year Fall 2015

East Central College

1964 Prairie Dell Road
Union, Missouri 63084
636-584-6500
www.eastcentral.edu

Admissions Office

ECC Campus
636-584-6563
admissions@eastcentral.edu

Program Faculty/ Coordinator

Rick Sumner
636-584-6654
Rick.Sumner@eastcentral.edu

Division Chair

Mary Beth Huxel
636-584-6613
Mary.Huxel@eastcentral.edu

Division

Business, Education, Social
Science and Technology
636-584-6139

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

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:

Building Equipment Contractors	\$44,700
Commercial and Industrial Machinery and Equipment Repair	\$47,120
Direct Selling Establishments	\$46,670
Hardware, Plumbing and Heating Equipment Wholesalers	\$50,930

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

STANDARD OCCUPATIONAL CLASSIFICATION (SOC)
49-9021.01

TUITION AND REQUIRED FEES
\$3,895 (In-District);
\$5,330 (Out-of-District)

BOOKS AND SUPPLIES
\$1,190.75

OTHER FEES AND EXPENSES
\$300

■ **ROLLA**
573-466-4100

■ **SULLIVAN**
573-468-8287

■ **UNION**
636-584-6588

■ **WASHINGTON**
636-239-0598

WWW.EASTCENTRAL.EDU

CERTIFICATE OF ACHIEVEMENT

CERTIFICATE OF ACHIEVEMENT COURSEWORK

COURSE		HOURS
AI 1335	Forced Air Heating/AC Systems & Controls Lecture ^A	5
AI 1343	Forced Air Heating/AC Systems & Controls Lab ^A	3
AI 1455	Heating Equipment Service & Installation Lecture ^A	5
AI 1463	Heating Equipment Service & Installation Lab ^A	3
AI 1085	Refrigeration, Components, & Electrical Fundamentals Lecture ^A	5
AI 1093	Refrigeration, Components, & Electrical Fundamentals Lab ^A	3
AI 1215	Refrigerants, A/C Installation, Testing & Troubleshooting Lecture ^A	5
AI 1223	Refrigerants, A/C Installation, Testing & Troubleshooting Lab ^A	3
AI 1710	Refrigeration Recovery/EPA Cert. ^A	0.5
AI 1720	Refrigeration Safety Cert.- R410A ^A	0.5
AI 2991	Customer Service & Employ Skills ^A	1.5
EM 1030	Heartsaver First Aid ^A	0.5
	Program Elective	3
	Program Elective	3
<u>Total Credit Hours</u>		<u>41</u>

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
<u>Total Credit Hours</u>		<u>23</u>