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# Heating, Ventilation, and Air Conditioning (HVAC) **Technology AAS**

Modern Heating, Ventilation and Air Conditioning (HVAC) operations depend on well-trained installation and service technicians. Government researchers say graduates of training programs that emphasize hands-on experience will have a definite advantage when seeking employment in heating, ventilation and air conditioning technology. JCCC provides you the opportunity to work on actual equipment while pursuing a degree or a certificate program. The 63-credit-hour associate of applied science degree program focuses on developing an awareness of basic mathematical and scientific principles of HVAC. The curriculum was developed with the manner by which these principles affect the control of temperature and the quality of air, design, testing, installation and development of heating and cooling systems.

If you select the AAS degree, you will learn the theory of operation as well as installation, duct design, service and repair of gas and electric furnaces, heat pumps and central air conditioners. The HVAC program at JCCC is nationally accreditation from the Partnership for Air-Conditioning, Heating, Refrigeration Accreditation (PAHRA), and you'll benefit when you tell prospective employers you completed a PAHRA-accredited program.

The requirements of the Heating, Ventilation and Air Conditioning (HVAC) AAS program will consist of four semesters. The first two semesters of the HVAC program will be focusing on the student's completing their HVAC certificate which consist of 33 hours. Afterwards, the HVAC students will complete their third and fourth semesters will consist of additional 15 hours of HVAC classes and 15 hours of general education classes.

(Major Code 3020; CIP Code 47.0201)

Heating, Ventilation and Air Conditioning Technology Program web page (http://www.jccc.edu/academics/credit/hvac/)

## Associate of Applied Science

### **Fall Semester**

CMGT 100Industrial Safety/OSHA-303HVAC 105HVAC Fundamentals*4HVAC 110Electrical Fundamentals*4HVAC 136Heating System Fundamentals*3HVAC 167Sheet Metal Layout and Fabrication*3
HVAC 105HVAC Fundamentals*4HVAC 110Electrical Fundamentals*4
HVAC 105 HVAC Fundamentals* 4
CMGT 100 Industrial Safety/OSHA-30 3

**Total Hours** 

## Spring Semester

COMS 155Workplace SkillsHVAC 164EPA 608 Refrigerant Management*HVAC 188Load Calculation and Duct Design*HVAC 202Cooling Systems*HVAC 251HVAC Installation and Start-up Procedures*HVAC 278Advanced Electrical Systems*	16
HVAC 164EPA 608 Refrigerant Management*HVAC 188Load Calculation and Duct Design*HVAC 202Cooling Systems*	3
HVAC 164EPA 608 Refrigerant Management*HVAC 188Load Calculation and Duct Design*	4
HVAC 164 EPA 608 Refrigerant Management*	4
	3
COMS 155 Workplace Skills	1
	1

**Total Hours** 

#### Summer Semester

HVAC 231	HVAC Rooftop Units*	3
Total Hours		3

## **Fall Semester**

Total Hours		13
Social Science and/or Economics Elective		3
PLUM 110	Introduction to Plumbing Systems	3
HVAC 275	HVAC Code Review*	3
HVAC 165	410-A Refrigerant Management*	1
ENGL 121	Composition I*	3

Total Hours

# **Spring Semester**

Total Hours		14
Humanities Elective		3
Communications Elective ^		3
MATH 120	Business Mathematics* (or higher)	3
HVAC 280	HVAC Internship*	3
HVAC 220	HVAC Trade Certification Review*	2

#### **Total Program Hours: 63**

- \* This course has registration requirements.
- ^ See all AAS general education electives (http://catalog.jccc.edu/degreerequirements/associate-applied-science/)