

HVAC Commercial Service Technician, A.A.S.

Modern residential, commercial, institutional and manufacturing operations depend on carefully monitored temperature conditions and 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 certificate program. The 64-credit-hour associate of applied science degree program focuses on developing an awareness of basic mathematical and scientific principles. The curriculum is concerned 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 commercial maintenance technician degree, you will learn the special emphasis is on energy conservation through computer management. The theory of operation as well as installation, service and repair of rooftop air conditioners, cooling towers, steam boilers and commercial systems air conditioning are part of the curriculum. In addition to the 31 core hours, the following courses are required for the A.A.S. degree, facilities maintenance technician option.

(Major Code 2870; State CIP Code 47.0201)

HVAC (<http://www.jccc.edu/hvac>)

Associate of Applied Science Degree

First Semester

HVAC 121	Basic Principles of HVAC*	4
HVAC 123	Electromechanical Systems	4
HVAC 143	Reading Blueprints and Ladder Diagrams	2
HVAC 155	Workplace Skills	1
INDT 125	Industrial Safety/OSHA 30	3
ENGL 121	Composition I*	3
EMS 121	CPR I - Basic Life Support for Healthcare Provider	1
Total Hours		18

Second Semester

HVAC 146	Plumbing Systems Applications	3
HVAC 150	Refrigerant Management and Certification	1
HVAC 167	Sheet Metal Layout and Fabrication	3
HVAC 221	Commercial Systems: Air Conditioning*	4
HVAC 231	HVAC Rooftop Units*	3
Total Hours		14

Third Semester

MATH 130	Technical Mathematics I*	3
HVAC 223	Commercial Systems: Heating*	4
ELTE 122	National Electrical Code I	4
CPCA 105	Introduction to Personal Computers: Windows	1
Social Science and/or Economic Elective [^]		3
Total Hours		15

[^] Social Science and/or Economic Elective (<http://catalog.jccc.edu/fall/degreecertificates/electives/social-sci-econ-aas>)

Fourth Semester

Technical Elective (see below)		3
General Education Elective (see below)		3
HVAC 229	Advanced Control Systems*	4
ELTE 205	Industrial Electrical Wiring*	4

Humanities Elective [^]	3
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Total Hours	17

[^] Humanities Elective (<http://catalog.jccc.edu/fall/degrecertificates/electives/humanities-aas>)

Technical Electives

HVAC 125	Energy Alternatives	2
HVAC 271	HVAC Internship*	3
HVAC 291	Independent Study*	1-7
ELTE 125	Residential Wiring Methods*	4

General Education Electives

ENGL 123	Technical Writing I*	3
SPD 120	Interpersonal Communication	3

Total Program Hours: 64