

AIR CONDITIONING TECHNOLOGY, SC

Program Description

The Skills Certificate, Air Conditioning Technology prepares students to install, maintain, service, troubleshoot, and repair critical systems in places such as data processing centers and hospitals. The program enables students to learn how to maintain, troubleshoot, and repair HVAC equipment for equipment cooling and other related machinery. Instruction includes classroom, laboratory, and hands-on work in the laboratory or in the field. Along with core classes, academic skills in math, science, and human relations are emphasized to help prepare students for challenges commonly found in the workplace.

This program is not eligible for financial aid. However, it may be eligible for scholarship funding if the student is awarded scholarships.

Air Conditioning Career Map (<https://sites.tmcc.edu/flipbook/career-maps/>)

Recommended Course Schedule

1st semester		Units
AC 107	Electrical and Controls for HVAC	6
AC 113	Schematic Reading for HVAC/R	3
AC 108	Motors for HVACR	3
Semester Total		12
2nd semester		
AC 201	HVAC Automatic Controls	3
AC 205	Commercial HVAC 2	3
AC 206	Commercial HVAC Systems 3	3
Semester Total		9
Total Units		21

¹ See approved General Education list for the AAS Degree. (<https://catalog.tmcc.edu/degrees-certificates/general-education/aas/>)

² See program recommendations or requirements.

Program Requirements

Skills Certificates can consist of a single course or a short set of courses that provide training for entry-level positions or career advancement. These short-term certificates may also prepare students to take state, national and/or industry-recognized certifications or licensing exams.

Skills certificates are awarded upon completion of coursework and marked on a student's transcripts at the end of the semester. Students cannot declare a skills certificate as one's major. Skills Certificates are not eligible for Financial Aid.

To earn a skills certificate, students must:

1. Maintain a minimum cumulative GPA of 2.0.
2. Have no financial or library obligation to the college.

Code	Title	Units
AC 107	Electrical and Controls for HVAC	6
AC 201	HVAC Automatic Controls	3
AC 205	Commercial HVAC 2	3
AC 206	Commercial HVAC Systems 3	3
AC 113	Schematic Reading for HVAC/R	3
AC 108	Motors for HVACR	3
Total Units		21

Program Outcomes

PSLO1: Incorporate workforce safety principals while performing basic tasks of a Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) technician.

PSLO2: Interpret electrical/mechanical schematics on HVAC/R equipment to diagnose mechanical or electrical problems in a residential or light commercial environment.

PSLO3: Diagnose and repair electrical or mechanical problems on commercial air conditioning equipment.