

2025-2026 TTC Catalog - Air Conditioning and Refrigeration (ACR)

ACR 001 - Air Conditioning Non-Equivalent

Lec: 0 **Lab:** * **Credit:** *

Indicates credit given for air conditioning/refrigeration course work transferred from another college for which there is no equivalent at TTC. *Hours vary depending on external course.

Division: Manufacturing and Maintenance

ACR 106 - Basic Electricity for HVAC-R

Lec: 3.0 **Lab:** 3.0 **Credit:** 4.0

Course Offered

Fall

Spring

This course includes a basic study of electricity including Ohm's Law and series and parallel circuits as they relate to heating, ventilating, air conditioning and refrigeration systems.

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

ACR 108 - Refrigeration Fundamentals

Lec: 2.0 **Lab:** 3.0 **Credit:** 3.0

Course Offered

Fall

Spring

This course is an introduction to the principles of refrigeration.

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

ACR 109 - Tools and Service Techniques II

Lec: 1.0 **Lab:** 3.0 **Credit:** 2.0

Course Offered

Fall

Spring

This course is an advanced study of tools and service equipment used in the installation and repair of HVAC equipment.

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

ACR 111 - Gas Heating Principles

Lec: 2.5 **Lab:** 1.5 **Credit:** 3.0

Course Offered

Spring

Summer

This course is the study of residential and commercial gas burners and their components.

Prerequisite

ACR 106

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

ACR 120 - Basic Air Conditioning

Lec: 3.0 **Lab:** 3.0 **Credit:** 4.0

Course Offered

Spring

Summer

This course is the study of various types of air conditioning equipment including electrical components, schematics and service to refrigeration circuits.

Prerequisite

ACR 106

and

ACR 108

and

ACR 109

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

ACR 131 - Commercial Refrigeration

Lec: 3.0 **Lab:** 3.0 **Credit:** 4.0

Course Offered

Fall

Spring

This course is a study of maintenance and repair of commercial refrigeration systems.

Prerequisite

ACR 106

and

ACR 108

and

ACR 109

and

Corequisite

ACR 111

and

ACR 120

and

ACR 150

and

ACR 210

and

ACR 224

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

ACR 150 - Basic Sheet Metal

Lec: 2.0 **Lab:** 0 **Credit:** 2.0

Course Offered

Fall
Summer

This course covers the tools and procedures required in the fabrication of ductwork.

Prerequisite

ACR 111
and
ACR 120

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

ACR 210 - Heat Pumps

Lec: 3.0 **Lab:** 3.0 **Credit:** 4.0

Course Offered

Fall
Summer

This course is a study of theory and operational principles of the heat pump.

Prerequisite

ACR 106
and
ACR 108
and
ACR 109

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

ACR 224 - Codes and Ordinances

Lec: 2.0 **Lab:** 0 **Credit:** 2.0

Course Offered

Fall
Spring
Summer

This course covers instruction on how to reference appropriate building codes and ordinances where they apply to the installation of heating and air conditioning.

Prerequisite

ACR 111

and

ACR 120

Grade Type: Letter Grade

Division: Manufacturing and Maintenance
