

CURRICULUM STANDARD

Effective Term
Fall 2000
[2000*03]

Curriculum Program Title

Commercial Refrigeration Technology

Code

A35200

Concentration

(not applicable)

Curriculum Description

The Commercial Refrigeration Technology curriculum is designed to provide technicians with the knowledge and skills necessary for the installation, troubleshooting, and repair of refrigeration equipment found in commercial environments.

Students will work on commercial refrigeration systems including walk-in units, reach-in refrigerators and freezers, ice machines, and other refrigeration equipment found in restaurants, supermarkets, convenience markets, and food processing plants.

Graduates should be able to assist in the startup, preventive maintenance, service, repair, and/or installation of commercial refrigeration equipment and systems.

*Curriculum Requirements**

[for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204 (3)]

- I. General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.
- II. Major Hours.** AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*
- III. Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

	AAS	Diploma	Certificate
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	30	12
Other Required Hours	0-7	0-4	0-1
Total Semester Hours Credit (SHC)	64-76	36-48	12-18

**Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic use of computers.*

Major Hours

[ref. 23 NCAC 02E.0204 (3)]

- A. Core.** The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.
- B. Concentration** (if applicable). A concentration of study must include a minimum of 12 semester hours credit from required subjects and/or courses. The majority of the course credit hours are unique to the concentration. The required subjects and/or courses that make up the concentration of study are in addition to the required subject/course core.
- C. Other Major Hours.** Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core or concentration. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit.

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	AAS	Diploma	Certificate
Minimum Major Hours Required	49 SHC	30 SHC	12 SHC
A. CORE <i>Courses required for the diploma are designated with *</i> Required Courses: * AHR 110 Introduction to Refrigeration 5 SHC * AHR 115 Refrigeration Systems 2 SHC AHR 125 HVAC Electronics 2 SHC AHR 235 Refrigeration Design 3 SHC AHR 263 Energy Management 2 SHC * REF 116 Commercial Systems I 4 SHC * REF 117 Refrigeration Controls 4 SHC * REF 123 Electrical Devices 4 SHC REF 259 Refrigeration Codes 3 SHC REF 260 Commercial Systems II 4 SHC Required Subject Areas: *Electricity. Select one: AHR 111 HVACR Electricity 3 SHC ELC 111 Introduction to Electricity 3 SHC	36 SHC	22 SHC	
B. CONCENTRATION (Not applicable)			
C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i> AHR (maximum of 13 SHC), BPR, CIS, COE, CSC, ELC, HYD, PHY, REF, and WOL <i>Foreign language courses (including ASL) that are not designated as approved other major hours may be included in all programs up to a maximum of 3 semester hours of credit.</i>			