CURRICULUM STANDARD

Curriculum Program Title	**Commercial Refrigeration Technology**	Program Code	**A35200**
Concentration	**(not applicable)**	CIP Code	*47.0201*

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 1D SBCCC 400.10]

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-based learning 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**

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*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

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-based learning 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.

Commercial Refrigeration Technology A35200

	AAS	Diploma	Certificate
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**

A.   **CORE**
*Courses required for the diploma are designated with ***
 	
Required Courses:
*   AHR 110   Intro to Refrigeration   5 SHC
*   AHR 115   Refrigeration Systems   2 SHC
     AHR 125   HVACR Electronics   3 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
	37 SHC	**22 SHC**	

B. **CONCENTRATION** *(Not applicable)*			
C. **OTHER MAJOR HOURS** *To be selected from the following prefixes:* AHR (maximum of 13 SHC), BPR, CIS, CSC, ELC, HYD, PHY, REF, WBL and WOL *Up to two semester hour credits may be selected from ACA.* *Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS and SPA.*			