

CURRICULUM STANDARD

Effective Term
Fall 1997
[1997*03]

Curriculum Program Title

Industrial Construction Technology

Code

A3526A

Concentration

Electrical

Curriculum Description

Electrical is a concentration under the curriculum title of Industrial Construction Technology. This curriculum is designed to prepare students for a diversity of jobs in the industrial construction industry as well as in supervisory and technical support roles.

A wide range of technical courses is offered in the mechanical and electrical areas such as machine processes, piping, electricity, drafting, mechanical installation, and other related topics. Second year students concentrate on industrial, electrical, and instrumentation topics.

Graduates should qualify for employment as skilled craftsmen or technicians with either industrial or construction firms

*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.

Industrial Construction Technology/Electrical A3526A

	AAS	Diploma	Certificate
Minimum Major Hours Required	49 SHC	30 SHC	12 SHC
A. CORE Required Courses: BPR 130 Blueprint Reading/Construction 2 SHC BPR 135 Schematics and Diagrams 2 SHC ISC 112 Industrial Safety 2 SHC MEC 111 Machine Processes I 3 SHC MNT 220 Rigging and Moving 2 SHC PFT 111 Piping and Valves 4 SHC Required Subject Areas: Work Experience. Select one: COE 112 Co-op Work Experience I 2 SHC MEC 175 Equipment Installation 2 SHC	17 SHC	NR	
B. CONCENTRATION <i>Courses unique to the concentration are designated with **</i> ELC 112 DC/AC Electricity 5 SHC ** ELC 240 Heavy Construction Wiring 4 SHC ** ELC 241 Electrical System Commissioning 3 SHC	12 SHC	NR	
C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i> BPR, BUS, CIS, COE, CSC, DFT, ELC, ELN, HYD, ISC, MAC, MEC, MNT, PFT, and WLD <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>			