

# CURRICULUM STANDARD

*Effective Term  
Spring 2020  
[2020\*01]*

Curriculum Program Title	<b>Facility Maintenance Technology</b>	Program Code	<b>A50190</b>
Concentration	<b>(not applicable)</b>	CIP Code	<b>46.0401</b>

## ***Curriculum Description***

This curriculum prepares individuals to repair and maintain electrical systems, mechanical systems, physical structures, and building automation systems of commercial and industrial institutions. Emphasis is on multi-disciplined systems maintenance, troubleshooting, and problem resolution.

Course work includes electrical, air conditioning, heating, computer applications, building automation and controls, facility maintenance, print reading, and industrial safety, with tracks in multi-trades or systems technologies.

Graduates should qualify for positions as maintenance technicians in commercial and industrial facilities.

## ***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.

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

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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.

### Facility Maintenance Technology A50190

	AAS	Diploma	Certificate																																																																
<b>Minimum Major Hours Required</b>	<b>49 SHC</b>	<b>30 SHC</b>	<b>12 SHC</b>																																																																
<p><b>A. CORE</b>  <i>Courses required for the diploma are designated with *</i></p> <p>Required Courses:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">*</td> <td style="width: 15%;">AHR 112</td> <td style="width: 60%;">Heating Technology</td> <td style="width: 20%; text-align: right;">4 SHC</td> </tr> <tr> <td>*</td> <td>AHR 120</td> <td>HVAC Maintenance</td> <td style="text-align: right;">2 SHC</td> </tr> <tr> <td></td> <td>BAT 111</td> <td>Building Automation Systems</td> <td style="text-align: right;">2 SHC</td> </tr> <tr> <td>*</td> <td>BPR 130</td> <td>Print Reading-Construction</td> <td style="text-align: right;">3 SHC</td> </tr> <tr> <td></td> <td>ELC 114</td> <td>Commercial Wiring</td> <td style="text-align: right;">4 SHC</td> </tr> <tr> <td>*</td> <td>MNT 110</td> <td>Intro to Maint Procedures</td> <td style="text-align: right;">2 SHC</td> </tr> </table> <p><b>Required Subject Areas. Select one of the following Tracks.</b></p> <p><b>Multi-Trades Track</b></p> <p><b>Carpentry. Select One:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td style="width: 15%;">CAR 111</td> <td style="width: 60%;">Carpentry I</td> <td style="width: 20%; text-align: right;">8 SHC</td> </tr> <tr> <td></td> <td>CAR 140</td> <td>Basic Carpentry</td> <td style="text-align: right;">4 SHC</td> </tr> </table> <p><b>*Plumbing. Select One:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td style="width: 15%;">PLU 111</td> <td style="width: 60%;">Intro to Basic Plumbing</td> <td style="width: 20%; text-align: right;">2 SHC</td> </tr> <tr> <td></td> <td>PLU 115</td> <td>Basic Plumbing</td> <td style="text-align: right;">4 SHC</td> </tr> </table> <p><b>Systems Technologies Track</b></p> <p><b>Computer Technology. Select one:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td style="width: 15%;">CIS 110</td> <td style="width: 60%;">Introduction to Computers</td> <td style="width: 20%; text-align: right;">3 SHC</td> </tr> <tr> <td></td> <td>ELC 127</td> <td>Software for Technicians</td> <td style="text-align: right;">2 SHC</td> </tr> </table> <p><b>*Electrical. Select One:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td style="width: 15%;">ELC 112</td> <td style="width: 60%;">DC/AC Electricity</td> <td style="width: 20%; text-align: right;">5 SHC</td> </tr> <tr> <td></td> <td>ELC 131</td> <td>Circuit Analysis I</td> <td style="text-align: right;">4 SHC</td> </tr> </table> <p><b>Safety. Select One:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td style="width: 15%;">ISC 112</td> <td style="width: 60%;">Industrial Safety</td> <td style="width: 20%; text-align: right;">2 SHC</td> </tr> <tr> <td></td> <td>ISC 121</td> <td>Envir Health and Safety</td> <td style="text-align: right;">3 SHC</td> </tr> </table>	*	AHR 112	Heating Technology	4 SHC	*	AHR 120	HVAC Maintenance	2 SHC		BAT 111	Building Automation Systems	2 SHC	*	BPR 130	Print Reading-Construction	3 SHC		ELC 114	Commercial Wiring	4 SHC	*	MNT 110	Intro to Maint Procedures	2 SHC		CAR 111	Carpentry I	8 SHC		CAR 140	Basic Carpentry	4 SHC		PLU 111	Intro to Basic Plumbing	2 SHC		PLU 115	Basic Plumbing	4 SHC		CIS 110	Introduction to Computers	3 SHC		ELC 127	Software for Technicians	2 SHC		ELC 112	DC/AC Electricity	5 SHC		ELC 131	Circuit Analysis I	4 SHC		ISC 112	Industrial Safety	2 SHC		ISC 121	Envir Health and Safety	3 SHC	<b>23-29 SHC</b>	<b>17-20 SHC</b>	
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<p><b>C. OTHER MAJOR HOURS</b>  <i>To be selected from the following prefixes:</i></p> <p>AHR, ATR, BAT, BPR, CAR, CIS, DFT, ELC, ELN, HOR, HYD, ISC, MAS, MCO, MEC, MNT, PCI, PLU, PME, REF, WBL, and WLD</p> <p><i>Up to two semester hour credits may be selected from ACA.</i></p> <p><i>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.</i></p>			
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