

**STATE BOARD OF COMMUNITY COLLEGES**

**CURRICULUM STANDARD REVISIONS**

The State Board is asked to approve revisions to the following curriculum standard(s):

Blue Ridge Community College  
Fire Protection Technology (A55240)

**Contact Person:**

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**CURRICULUM STANDARD REVISION**

**Blue Ridge Community College  
Fire Protection Technology (A55240)**

Blue Ridge Community College (BRCC), the lead college for the 2012-13 Fire Protection Technology Career and Technical Education (CTE) Grant Project, is seeking approval to revise the Fire Protection Technology (A55240) curriculum standard, effective Fall 2014.

**Proposed Revision:**

- Format the curriculum standard utilizing the Career Clusters model.
- Revise the curriculum (pathway) description.
- Add the following courses to the Technical Core:
  - FIP 152 Fire Protection Law*
  - FIP 228 Local Government Finance*
- Remove the following course from the Technical Core:
  - FIP128 Detection and Investigation*
- Add the following prefixes to the Other Major Hours section of the curriculum standard: BUS, BPR, COM, ELC, EPT, GIS, HSE, LOG, OST, PAD, PED, and SOC.

*Please note that the addition and deletion of courses to the technical core will result in an increase of core hours from 15 SHC to 18 SHC.*

**Rationale of Requesting College:** The proposed revisions are recommended because of evolving state and local fire protection workplace competency requirements necessary for individuals who expect to assume a leadership role within a fire and rescue organization. Utilization of the redesigned career clusters standard template promotes career pathways between secondary and post secondary education. Additional prefixes were added to address diverse job skills that today's fire officers require to be effective leaders.

**Vote Results:**

Colleges approved to offer the program:	20
Colleges in favor of recommendations:	16
Colleges opposed to recommendations:	0
Colleges not responding:	4

**Coordinator:** Mr. Frank Scuiletti

# PROPOSED

## Curriculum Standard for Fire Protection Technology

**Career Cluster: Law, Public Safety, Corrections & Security**

**Cluster Description:** Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.

**Pathway:** Public Service Technologies

**Effective Term:** Fall 2014 (2014\*03)

### Program Majors Under Pathway:

Program Major / Classification of Instruction Programs (CIP) Code	Credential Level(s) Offered	Program Major Code
Fire Protection Technology   CIP Code 43.0201	AAS/Diploma/Certificate	A55240

**Pathway Description:** The Fire Protection Technology curriculum is designed to provide students with knowledge and skills in the technical, managerial, and leadership areas necessary for advancement within the fire protection community and related firefighting industries, and to provide currently employed firefighters with knowledge and skills often required for promotional consideration.

Course work includes diverse fire protection subject areas, including fire prevention and safety, public education, building construction, fire ground strategies and tactics, and local government finance and laws, as they apply to emergency services management. Emphasis includes understanding fire characteristics and the structural consequences of fire; risk assessment and management; and relevant research, communications, and leadership methodologies.

Employment opportunities exist with fire departments, governmental agencies, industrial firms, insurance rating organizations, and educational organizations.

*Program Description: Choose one of the following 4<sup>th</sup> paragraphs to use in conjunction with the first three paragraphs of the pathway description above for documentation used to identify each Program Major:*

N/A

### I. General Education Academic Core

[Curriculum Requirements for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.97 (3)]: 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.

### Fire Protection Technology

Recommended General Education Academic Core	AAS	Diploma	Certificate
<b>Minimum General Education Hours Required:</b>	<b>15 SHC</b>	<b>6 SHC</b>	<b>0 SHC</b>
<i>Courses listed below are recommended general education courses for this curriculum standard. Colleges may choose to include additional or alternative general education courses to meet local curriculum needs.</i>			
<b>Communication:</b> General education courses within communication classification	<b>6 SHC</b>	<b>3-6 SHC</b>	<b>Optional</b>
<b>Humanities/Fine Arts:</b> General education courses within Humanities/Fine Arts classification	<b>3 SHC</b>	<b>0-3 SHC</b>	<b>Optional</b>
<b>Social/Behavioral Sciences:</b> General education courses within Social/Behavioral Sciences classification	<b>3 SHC</b>	<b>0-3 SHC</b>	<b>Optional</b>
<b>Natural Sciences/Mathematics:</b> General education course within Natural Sciences/Mathematics classification	<b>3 SHC</b>	<b>0-3 SHC</b>	<b>Optional</b>

**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. Below is a description of each section under Major Hours.

- A. Technical Core.** The technical core is comprised of specific courses which are required for all Program Majors under this Curriculum Standard. 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 curriculum core courses or core subject area of the AAS program.
- B. Program Major(s).** The Program Major must include a minimum of 12 semester hour's credit from required subjects and/or courses. The Program Major is in addition to the technical 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 each prefix listed, with the exception of prefixes listed in the core.

<i><b>Fire Protection Technology</b></i>	<b>AAS</b>	<b>Diploma</b>	<b>Certificate</b>
<b>Minimum Major Hours Required:</b>	<b>49 SHC</b>	<b>30 SHC</b>	<b>12 SHC</b>
<p><b>A. Technical Core:</b>  <i>Courses required for the diploma are designated with *</i></p> <p><b>Required Courses:</b></p> <ul style="list-style-type: none"> <li>*FIP 120 Intro to Fire Protection 3 SHC</li> <li>*FIP 124 Fire Prevention &amp; Public Ed 3 SHC</li> <li><del>*FIP 128 Detection and Investigation 3 SHC</del></li> <li>*FIP 132 Building Construction 3 SHC</li> <li>*FIP 152 Fire Protection Law 3 SHC</li> <li>*FIP 220 Fire Fighting Strategies 3 SHC</li> <li>*FIP 228 Local Govt Finance 3 SHC</li> </ul> <p><b>Required Subject Areas.</b> None</p>	<p><b>15 SHC</b> <b>18 SHC</b></p>	<p><b>15 SHC</b> <b>18 SHC</b></p>	
<b>B. Program Major(s): Not Applicable</b>			
<p><b>C. Other Major Hours: To be selected from the following prefixes:</b></p> <p><b>BUS, BPR, CHM, CIS, CJC, COE, COM, CSC, ECO, ELC, EHS, EMS, EPT, FIP, GIS, HSE, LOG, NET, OST, PAD, PED, PHY, POL, SOC, and WBL.</b></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>			
<p><b>III. Other Required Hours</b></p> <p><i>A college may include courses to meet graduation or local employer requirements in a certificate (0-1 SHC), diploma (0-4 SHC), or an associate in applied science (0-7 SHC) 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.</i></p>			

#### IV. Employability Competencies

Fundamental competencies that address soft skills vital to employability, personal, and professional success are listed below. Colleges are encouraged to integrate these competencies into the curriculum by embedding appropriate student learning outcomes into one or more courses or through alternative methods.

- A. Interpersonal Skills and Teamwork** – The ability to work effectively with others, especially to analyze situations, establish priorities, and apply resources for solving problems or accomplishing tasks.
- B. Communication** – The ability to effectively exchange ideas and information with others through oral, written, or visual means.
- C. Integrity and Professionalism** – Workplace behaviors that relate to ethical standards, honesty, fairness, respect, responsibility, self-control, criticism and demeanor.
- D. Problem-solving** – The ability to identify problems and potential causes while developing and implementing practical action plans for solutions.
- E. Initiative and Dependability** – Workplace behaviors that relate to seeking out new responsibilities, establishing and meeting goals, completing tasks, following directions, complying with rules, and consistent reliability.
- F. Information processing** – The ability to acquire, evaluate, organize, manage, and interpret information.
- G. Adaptability and Lifelong Learning** – The ability to learn and apply new knowledge and skills and adapt to changing technologies, methods, processes, work environments, organizational structures and management practices.
- H. Entrepreneurship** – The knowledge and skills necessary to create opportunities and develop as an employee or leader.

*\*An **Employability Skills Resource Toolkit** has been developed by NC-NET for the competencies listed above. Additional information is located at: <http://www.nc-net.info/employability.php>*

*\*\*The **North Carolina Career Clusters Guide** was developed by the North Carolina Department of Public Instruction and the North Carolina Community College system to link the academic and Career and Technical Education programs at the secondary and postsecondary levels to increase student achievement. Additional information about Career Clusters is located at: [http://www.nc-net.info/NC\\_career\\_clusters\\_guide.php](http://www.nc-net.info/NC_career_clusters_guide.php) or <http://www.careertech.org>.*

*Summary of Required Semester Hour Credits (SHC) for each credential:*

	<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>

# CURRENT CURRICULUM STANDARD

Effective Term  
Fall 2004  
[2004\*03]

Curriculum Program Title	<b>Fire Protection Technology</b>	Code	<b>A55240</b>
Concentration	<b>(not applicable)</b>		

## *Curriculum Description*

The Fire Protection Technology curriculum is designed to provide individuals with technical and professional knowledge to make decisions regarding fire protection for both public and private sectors. It also provides a sound foundation for continuous higher learning in fire protection, administration, and management.

Course work includes classroom and laboratory exercises to introduce the student to various aspects of fire protection. Students will learn technical and administrative skills such as hydraulics, hazardous materials, arson investigation, fire protection safety, fire suppression management, law, and codes.

Graduates should qualify for employment or advancement in governmental agencies, industrial firms, insurance rating organizations, educational organizations, and municipal fire departments. Employed persons should have opportunities for skilled and supervisory-level positions within their current organizations.

## *Curriculum Requirements\**

*[for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.97(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-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>

\*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.

# CURRENT

## Major Hours

[ref. 1D SBCCC 400.97(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-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.

### Fire Protection Technology A55240

	AAS	Diploma	Certificate
<b>Minimum Major Hours Required</b>	<b>49 SHC</b>	<b>30 SHC</b>	<b>12 SHC</b>
<b>A. CORE</b> <i>Courses required for the diploma are designated with *</i>  <b>Required Courses:</b> * FIP 120 Introduction to Fire Protection 3 SHC * FIP 124 Fire Prevention and Public Education 3 SHC * FIP 128 Detection and Investigation 3 SHC * FIP 132 Building Construction 3 SHC * FIP 220 Fire Fighting Strategies 3 SHC  <b>Required Subject Areas:</b> None	<b>15 SHC</b>	<b>15 SHC</b>	
<b>B. CONCENTRATION</b> (Not applicable)			
<b>C. OTHER MAJOR HOURS</b> <i>To be selected from the following prefixes</i>  CHM, CIS, CJC, COE, CSC, ECO, EHS, EMS, EPT, FIP, HSE, NET, PED, PHY, POL, and *WBL  <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>  <i>*WBL prefix will be available in fall 2014.</i>			