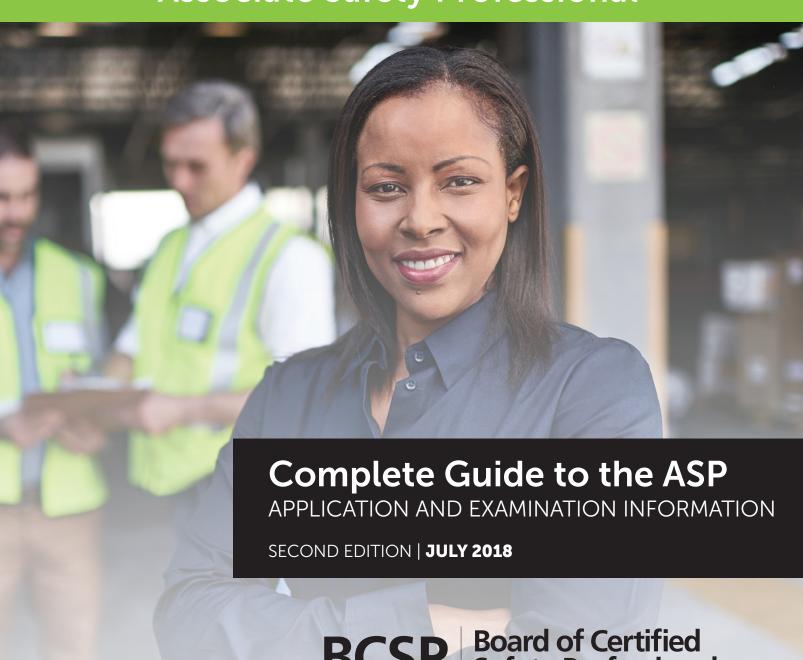


# **Associate Safety Professional®**



**BCSP** Board of Certified Safety Professionals

- Since 1969 -



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Complete Guide to the ASP® Second Edition | July 2018

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### **DISCLAIMER:**

An individual's status with BCSP is an indicator that an individual has completed a combination of defined education, experience, and examination requirements. However, certification is not a guarantee or assurance of the competence or ability of any particular individual. Further, given the rapid changes in the field, BCSP cannot warrant that any examination and other certification materials will at all times reflect the most current state of the art.

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## **CHAPTER 1** | INTRODUCTION



# The Associate Safety Professional® (ASP®) Certification

BCSP awards the Associate Safety Professional to individuals who demonstrate competency and work full-time in professional positions where at lease 50% of duties are task devoted to the prevention of harm to individuals in the workplace environment. Whether your career goals include seeking a new position, moving up in your current organization or moving to private practice, you can accelerate your opportunities by achieving the Associate Safety Professional (ASP) certification. You can improve your chances for success, being selected for leadership and senior positions, and increased salary through the ASP credential. BCSP offers you the opportunity to rise above the competition by adding the ASP certification to your portfolio.

### **Purpose of This Guide**

The purpose of this guide is to walk you through the process of applying for and taking the examination leading to the ASP certification. This guide is the first step to help you achieve the credential.

### How to Use This Guide

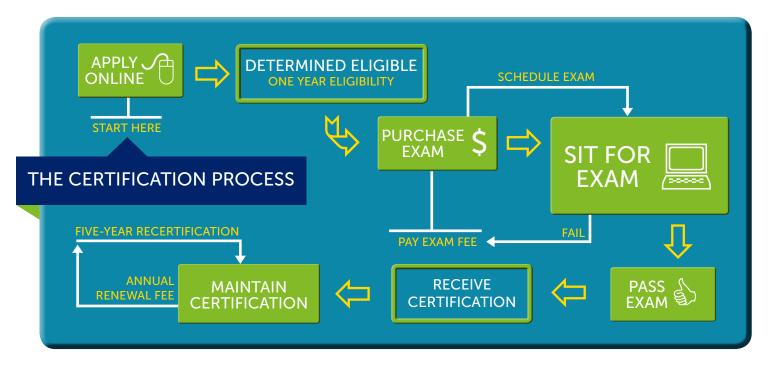
This guide provides you with in-depth information regarding the application process, examination process and the rules and procedures essential in retaining the ASP certification after you achieve it. Reading and following the suggestions and rules in this guide will help you navigate your path to the ASP certification.

Click on "My Profile" at bcsp.org to create an account and apply for your desired certification(s). If you need further assistance you may contact the Certification Services Department at +1 317-593-4800 or by email at bcsp@bcsp.org.

### **Important Information**

For the most current version of this publication, please visit bcsp.org/ASP.

As a candidate or certificant you are solely responsible to keep BCSP informed of your current mail and email address. If either address changes, you must notify BCSP. You could lose your credential or eligibility status if you miss important notifications related to your credential.



### **ABOUT BCSP**

Headquartered in Indianapolis, Indiana, BCSP is a not-for-profit corporation recognized as a leader in high-quality, accredited credentialing for safety, health, and environmental (SH&E) practitioners. BCSP establishes standards and certifies competency criteria in professional safety practice. Since 1969, over 68,000 of BCSP's CSP, SMS, ASP, OHST, CHST, STS, STSC, or CET certifications have been achieved.

### CAREER INFORMATION

For details on careers in SH&E, download from the BCSP website:

• Career Paths in Safety (brochure)

For a comprehensive list of accredited U.S. academic programs, search the BCSP Academic Database. If you have questions, please email us: bcsp@bcsp.org.

### **ACCREDITATION AND RECOGNITION**

BCSP's certifications are accredited by at least one of the following independent third-party organizations that evaluate certification requirements on a regular basis.

- American National Standards Institute (ANSI), ansi.org [ISO/IEC 17024, General Requirements for Bodies Operating Certification Systems of Persons]
- National Commission for Certifying Agencies (NCCA), credentialingexcellence.org
- Council of Engineering and Scientific Specialty Boards (CESB), cesb.org

BCSP has been granted special consultative status with the United Nations Economic and Social Council (ECOSOC) since 2014.

### **CERTIFICATIONS**

### Certified Safety Professional® (CSP®)

- has been in operation for more than 40 years with over 40,000 CSPs certified
- is the premier certification in the safety profession
- covers a wide range of safety, health and environmental (SH&E) practice disciplines

### Safety Management Specialist (SMS)

 demonstrates management skills required for an organization's safe operation, including defining and utilizing safety management systems

### Associate Safety Professional® (ASP®)

- demonstrates a broad scope of knowledge of SH&E practice
- serves as one of several approved credentials meeting requirements for the CSP

### Occupational Hygiene and Safety Technician® (OHST®)

 provides practitioners with partial responsibility in SH&E with a high quality certification

### Construction Health and Safety Technician® (CHST®)

 offers a certification for individuals who work in a construction craft or are construction safety specialists

### Safety Trained Supervisor® (STS®)

- provides a quality certification for work group leaders in various industries who are responsible for the safety and health of their workers
- is a leading indicator of safety performance
- has led to reductions in injuries and workers' compensation claims and has created productivity gains in participating companies

### Safety Trained Supervisor Construction® (STSC®)

 holds the same requirements and benefits as the Safety Trained Supervisor certification but provides a quality certification for work group leaders working specifically in construction

# Certified Environmental, Safety and Health Trainer® (CET®)

 certifies those who have experience and expertise in developing, designing, and delivering SH&E training



Since 1969 —



# CHAPTER 2 | CERTIFICATION SUMMARY



### **Overview of the ASP Certification**

The ASP is a certification awarded by BCSP to individuals who meet all of the requirements established by the Board. It is one of several approved credentials that can qualify an individual to sit for the CSP examination.

### The ASP Process

One of the most common questions by potential candidates is "What do I have to do to become an ASP?" The process has several stages, each one building on the other.

### 1. Are You Eligible?

### Academic Requirement:

All individuals applying for the ASP must have a bachelor's degree or higher in any field from an accredited institution; or an associate in safety, health, or the environment. The associate degree must include at least four courses with at least 12 semester hours/18 quarter hours of study in the safety, health, or environmental domains covered in the ASP and CSP examination blueprints.

There is no waiver of the academic requirement and proof of a minimum qualifying degree must be provided. For U.S. degrees, BCSP requires the school hold institutional accreditation recognized by the Council for Higher Education Accreditation (CHEA) (chea.org) and/or the U.S. Department of Education (ed.gov).

Continuing education courses, seminars, and certificate programs are not a substitute for, and do not receive credit toward, the academic requirement.

Unaccredited degrees are a growing concern and some states have laws making it illegal to use unaccredited degrees. Applicants and certificants cannot use unaccredited degrees and the use is a violation of the *BCSP Code of Ethics*.

BCSP requires all degrees from colleges and universities outside the United States be evaluated for U.S. equivalency. Information regarding the process for having an international degree evaluated for BCSP certification is available in Chapter 3, "Application Instructions".

### Experience Requirement:

ASP candidates must have one year professional safety experience to sit for the ASP exam. Professional safety experience must meet the following criteria to qualify:

- ☐ Professional safety must be the primary function of the position. Collateral duties in safety are not counted.
- ☐ The position's primary responsibility must be the prevention of harm to people, property, or the environment, rather than responsibility for responding to harmful events.
- □ Professional safety functions must be at least 50% of the position duties. BCSP defines full-time as at least 35 hours per week. Part-time safety experience is allowed if the applicant has the equivalent of at least 900 hours of professional safety work during any year (75 hours per month or 18 hours per week) for which experience credit is sought.
- ☐ The position must be at a professional level. This is determined by evaluating the degree of professional charge by which there is a reliance of employees, employers or clients on the person's ability to identify, evaluate and control hazards through engineering and/or administrative approaches.
- ☐ The position must have breadth of professional safety duties. This is determined by evaluating the variety of hazards about which the candidate must advise and the range of skills involved in recognizing, evaluating, and controlling hazards.

### 2. Submit Your Application

BCSP reviews all application materials to determine eligibility for the ASP examination. Candidates must meet all requirements in order to be made eligible to sit for the ASP examination. More information about the application process can be found in Chapter 3, "Application Instructions".

### 3. Purchase Your Exam

Anytime during the one-year eligibility period, candidates may pay for their examination online or by calling Certification Services at +1 317-593-4800. The examination authorization period begins the day a candidate purchases an exam (within their one year eligibility period) and ends once he/she has passed the examination or on the day their eligibility ends, whichever comes first.

Active or retired military may qualify for a reimbursement of the examination fee through the VA. The VA Brochure is located on the BCSP website for more information.

### 4. Schedule Your Exam

Once BCSP has processed your examination fee, you will then be able to schedule your examination with Pearson VUE. Pearson VUE is the official computer-based testing provider for all BCSP examinations. More information about scheduling your examination can be found in Chapter 5, "Exam Overview".

### 5. Sit For Your Exam

Candidates eligible for the ASP examination must pass the examination within their one year of eligibility.

BCSP allows candidates to extend their eligibility time limit once during their term and the extension is valid for one year. Extensions are available for purchase within the last 60 days of a candidate's eligibility period. Extensions can be purchased through "My Profile" at bcsp.org, as long as the candidate is eligible.

Those who do not meet this time limit nor purchase the eligibility extension must reapply as a new candidate and meet the current application requirements. A detailed outline of eligibility is provided once an application has been approved.

BCSP's examination provider, Pearson VUE (pearsonvue.com/BCSP), has test centers located around the world and operates every business day. All Pearson VUE testing sites are subject to change based on criteria provided by Pearson VUE. Please be sure to check regularly for available locations when scheduling an exam. Examinations are delivered via computer at the test center.

Candidates will be given their examination results at the center immediately after submitting their exam. Candidates that fail may purchase a new examination authorization which can be used to sit for the exam six weeks after the first attempt, as long as they remain eligible.

For a list of current fees, visit www.bcsp.org/ Certifications/Safety-Certifications-at-a-Glance.

Note: If you need special examination facilities or accommodation arrangements for documented disabilities (consistent with the Americans with Disabilities Act and the American Disabilities Amendment Act), you must request the accommodation with BCSP at the time you purchase your exam. Accommodation requests should be emailed to accommodations@bcsp. org. Failure to request at the time of exam purchase may impact your ability to have the accommodation provided at the testing center.

### 6. Maintain Certification

### Annual Renewal Fees:

After completing all of the requirements, BCSP awards candidates who pass the ASP exam the ASP credential. Certificants will need to pay annual renewal fees in order to maintain certification. A prorated renewal fee will be applied for the remainder of the year in which the candidate passes the exam.

### Recertification:

ASPs must remain up-to-date with changes in professional practice by earning 25 recertification points every five years.

Additional information regarding recertification can be found in the *Recertification Guide*, located at www.bcsp.org/Certifications/Recertification.

# CHAPTER 3 | APPLICATION INSTRUCTIONS



### **Application Instructions**

Individuals who wish to pursue the ASP must create a profile through "My Profile" at bcsp. org. Once you have created your profile, you may select the certification application you are interested in and follow the online instructions. Candidates for certification apply only once, provided they follow all policies and stay within their eligibility time limit.

A complete application requires candidates to provide:

- 1. Contact Information
- 2. Experience Information
- 3. Education Information
- **4. Application Agreement and Validation** (acknowledging truthful information has been provided, informing BCSP of any criminal convictions or unethical behavior, agreeing to adhere to BCSP Code of Ethics, and not disclose any information.)

### 5. Payment of Application

If you are unable to submit online and require a paper application, there will be a processing fee. Please call our office for more details.

Do not send resumes, professional papers, continuing education course certificates, or any other items that are not specifically requested.

After you submit your application, BCSP Certification Services will contact you with any questions or once your application review has been completed.

The application fee is nonrefundable and nontransferable. For a list of current fees, visit bcsp.org/Certifications/Safety-Certifications-at-a-Glance. You will be prompted to include payment along with your application. Your application will not be complete until payment for the application fee and any additional requested materials have been received. If all application requirements have not been met

within one year of the application submission date, the application will expire.

### **Submitting Transcripts**

Information on submitting transcripts will be provided as you fill out your application online.

International transcripts must be evaluated by BCSP's approved third party degree evaluators so that U.S. equivalency may be determined. The evaluation must be completed by a member of the National Association of Degree Evaluation Services (NACES). A list of NACES members can be found at naces.org.

### **Validation**

BCSP requires applicants to disclose criminal convictions, disciplinary actions, and denial or revocation of certifications, licenses and professional registrations taken against the applicant by the issuing certification board or agency. BCSP uses its policy relating to criminal convictions to determine whether the application can proceed or whether it will be terminated. In some cases, a BCSP attorney may contact the applicant to clarify information about the conviction. A copy of the BCSP criminal conviction policy appears at bcsp. org/ASP under the Resources tab "Policies and Forms."

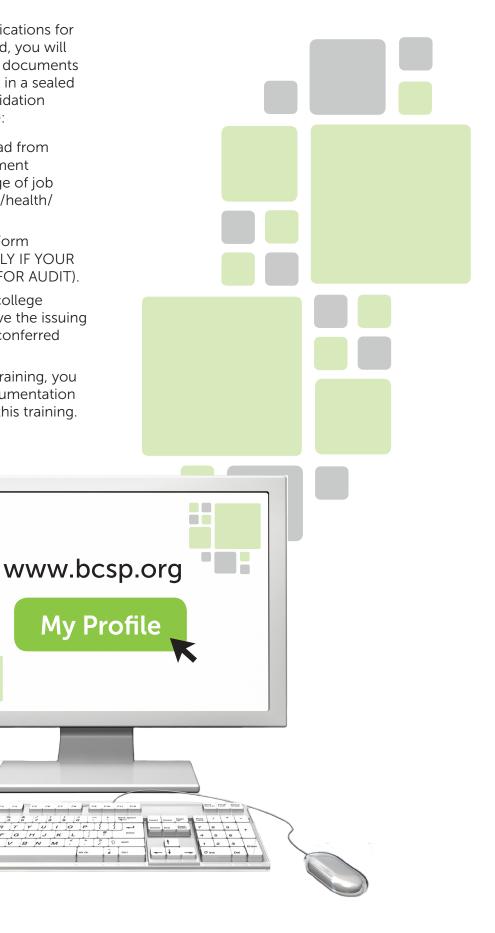
Applicants are required to provide disclosure of:

- All felony convictions
- All misdemeanor convictions within the past five (5) years (Minor traffic violations and petty offenses DO NOT have to be reported)
- Any record of unethical behavior
- Information related to having a professional license or certification denied, suspended or revoked for reasons other than not meeting qualifications, failure of examination, or failure to pay renewal fees

### **Auditing**

BCSP randomly selects 5% of applications for audit. If your application is selected, you will be required to provide experience documents and an official university transcript in a sealed envelope. Acceptable forms of validation documentation for experience are:

- A letter on company letterhead from employer validating employment dates, job title and percentage of job duties which are/were safety/health/ environmental.
- BCSP Experience Validation Form completed by employer (ONLY IF YOUR APPLICATION IS SELECTED FOR AUDIT).
- 3. If your application required college education, you must also have the issuing university send your official conferred transcript to BCSP.
- 4. If your application required training, you must upload supporting documentation proving your completion of this training.



### **CHAPTER 4** | PREPARING FOR THE EXAM



### **Preparing for the Examination**

You may use various approaches to prepare for the examination:

- Complete Self-Assessment
- Perform individual study
- Participate in informal study groups
- Attend formal review courses

Some keys to success include:

- Knowing your strengths and weaknesses
- Having an examination preparation plan
- Developing a test-taking strategy
- · Understanding how to use your calculator

### **Having an Examination Study Plan**

The examination blueprint shows how the items on an examination are distributed across domains and tasks/topics. The percentage of items per domain is noted on the examination blueprint.

Converting your subject strengths and weaknesses into a study plan is likely to increase your overall examination score. Scoring well in one subject area can compensate for a weaker score in another subject area. However, there may not be enough items in your strong areas to achieve a passing score.

Note that knowledge and understanding are essential in passing the examination. Relying only on simulated examination items is not the best way to increase knowledge and understanding. Use simulated items to provide insight into the areas in which you should engage in additional study.

### **Developing a Test-Taking Strategy**

Knowing how to take the examination will help improve your score. The examination uses multiple-choice items with only one correct answer and three incorrect answers. Remember, the goal is to get as many items correct as possible. There is no penalty for selecting an incorrect answer. However, only correct answers count toward reaching the passing score.

- Read the items carefully
- Consider the context
- Use examination time wisely
- Go back to troublesome items
- Complete all items

### **Using Your Authorized Calculator(s)**

The candidate is allowed to bring one or two calculators into the secure testing room as long as they both are among the brands and models listed:

- Casio models FX-115, -250, -260 or -300
- Hewlett Packard models HP 9, 10, 12 or 30
- Texas Instruments models TI-30, -34, -35 or -36

Different versions of the above models will be permitted. For example, the HP-30S and TI-30X calculators will be permitted, as they are versions of these models.

If the candidate does not have one of the approved calculators, he or she should use the online calculator that is part of the exam. Test centers do not provide calculators or allow candidates to bring in non-approved models.

Make sure you know how to use your calculator(s) so you do not waste valuable time trying to understand how to use it once the examination clock starts. It is a good idea to practice working solutions and to be able to recall the correct calculator procedures.

Remember, solutions to computational items usually are rounded. You should select the answer closest to the computed value.

# Obtaining Information on the Body of Knowledge

Draw on your experience and on professional and study references in your own library, a company library, or a public library. BCSP maintains a list of examination references for each certification at bcsp.org/Resources/Review-and-Study-Sources. Examination items are not necessarily taken directly from these sources. However, BCSP believes these references represent the breadth and depth of coverage of safety, health, and environmental practice.

### **BCSP Online Self-Assessment**

It is essential for you to compare your knowledge against what is contained in the examination blueprint. One way to do this is by using a self-evaluation method. A self-evaluation helps determine how well you know various subjects.

BCSP offers an online self-assessment for all certifications. The self-assessment can help diagnose how well you know the body of knowledge, as well as to help refresh your test-taking skills.

The online self-assessment is based on the blueprint described in this guide and is half the length of a full examination.

The online self-assessment allows six (6) months access, during which time users have unlimited assessment attempts. Results from each attempt are provided, and a results history is maintained so candidates may evaluate their progress.

Note: The self-assessment is designed to assist the candidate in evaluating their strengths and weaknesses, strategize test taking pace, and plan future studying accordingly. The self-assessment is not considered training or preparation in any manner.

To order a self-assessment, please log on to "My Profile" at bcsp.org to make the purchase.

### **Other Review and Study Sources**

A number of professional membership organizations, trade organizations, colleges, and universities, and private companies offer study courses, software, and materials to assist candidates when preparing for BCSP examinations. Because candidates for BCSP examinations often ask where to locate review courses and materials, BCSP maintains an online list strictly as a courtesy at bcsp.org/Resources/Review-and-Study-Sources.

Beyond the written materials BCSP publishes, BCSP has no involvement in the development, content, or distribution of any courses or materials associated with preparing for BCSP examinations or evaluating readiness. BCSP neither endorses the providers shown on the online list nor evaluates the providers or the providers' materials for consistency with BCSP examination blueprints or with any aspect of any BCSP examination.

Candidates must contact the sources directly about materials, course schedules, fees, or matters related to satisfaction with their products or services.

### **Examination Integrity**

A key to a successful and respected credentialing program is examination security. Without it, a peer-operated credentialing program has little value. BCSP relies on the ethical behavior of candidates and certificants to maintain the security of BCSP examinations.

When those who hold credentials or those who are pursuing credentials reveal information about the content of BCSP examinations, they violate the agreement all candidates accept when they apply for certification and when they take an examination. Applicants, examination candidates, or certificants who reveal confidential information about the content of BCSP examinations through any means also violate the BCSP Disciplinary Action Policy and the BCSP Code of Ethics located at bcsp.org/About.

BCSP pursues legal actions against organizations, individuals not seeking certification, and individuals who fraudulently



### **CHAPTER 5** | EXAM OVERVIEW



### **Computer-Based Testing**

The ASP examination uses computer-based testing, with one item appearing on the screen at a time. You will simply use a mouse to point to the desired answer and click on it to select it. Answers can be changed the same way.

You can mark items to return to later or simply skip them and move to the next item. At the end of the examination, there is a table of items and answers selected. The table also shows skipped and marked items. You can return to any item by simply clicking on the item number.

Prior to beginning the actual examination, there is a tutorial. Your examination clocks begins when you officially commence with the examination itself. After completing the examination, you will select to end the exam to formally submit your examination for scoring. You will receive results before you leave the testing center facility.

You will have FIVE (5) hours to complete the ASP examination. Examinations are closed book, and accessing external reference materials during your examination is not permitted. For use during the examination, the testing center will provide you with materials for working out calculations by hand.

Refer to the *Pearson VUE Computer-Based Testing Brochure* located at *bcsp.org* for more details and requirements.

### **Scheduling Your Exam**

Once you have purchased your examination, BCSP will send you information on scheduling your examination with a Pearson VUE testing center. It is important that when you schedule, you do so on Pearson VUE's website or by calling their national number. Local testing centers do not schedule examinations. All Pearson VUE testing sites are subject to change based on criteria provided by Pearson VUE. Please be sure to check regularly for available locations when scheduling an exam.

For a complete list of testing center rules and procedures, visit PearsonVUE.com/BCSP.

# General Description of the ASP Examination

All candidates for the ASP must pass the ASP examination to earn the credential.

The ASP examination contains 200 multiplechoice items with four possible answers and only one correct answer. Data necessary to answer items are included in the item. Each item is independent and does not rely on the correct answer to any other item. Formulas will be embedded into each item that requires one.

### **ASP Examination Blueprint**

BCSP examination blueprints are based on surveys of what safety professionals do in practice. The ASP examination is required for candidates to demonstrate knowledge of professional safety practice at the ASP level.

The top levels, called domains, represent the major functions performed by safety professionals at the ASP level. Each domain is divided among several topics. Within each topic are lists of knowledge areas necessary for carrying out the topic in that domain. Each domain heading is accompanied by a percentage label which represents the proportion of the actual ASP examination devoted to that domain. The following pages describe the subject matter covered by the ASP examination.

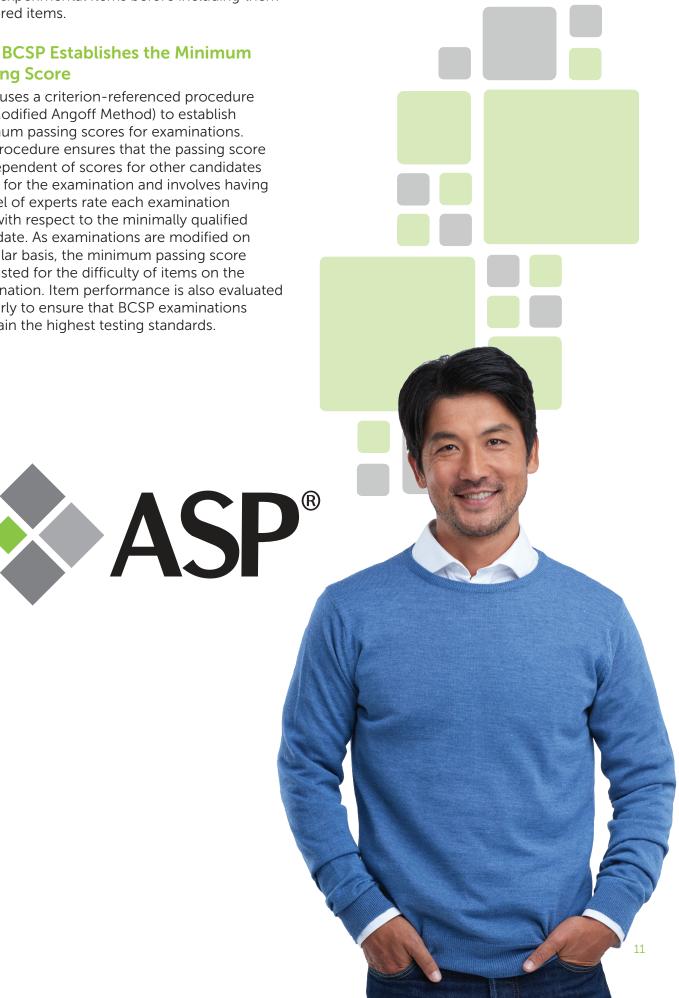
# **Examination Content Development and Revision**

BCSP updates examinations regularly. Items come from safety professionals in practice. Before items are accepted into item banks, they go through rigorous technical, psychometric, and grammatical editing. Also, 10–15% of the items on BCSP examinations are experimental, and do not contribute to a candidate's pass/fail decision. BCSP analyzes the performance of

these experimental items before including them as scored items.

### **How BCSP Establishes the Minimum Passing Score**

BCSP uses a criterion-referenced procedure (the Modified Angoff Method) to establish minimum passing scores for examinations. This procedure ensures that the passing score is independent of scores for other candidates sitting for the examination and involves having a panel of experts rate each examination item with respect to the minimally qualified candidate. As examinations are modified on a regular basis, the minimum passing score is adjusted for the difficulty of items on the examination. Item performance is also evaluated regularly to ensure that BCSP examinations maintain the highest testing standards.





# **ASP9** EXAM BLUEPRINT

The following six pages contain the entire ASP9 Exam Blueprint.

### **Domain 1**

Mathematics • 18%

### Topic 1

**Chemistry and Industrial Hygiene Calculations** 

### Knowledge of:

- 1. Corrosives
- 2. Flammables
- 3. Toxic materials
- 4. Chemical reactions

### Topic 2

**Electrical Calculations** 

#### Knowledge of:

- 1. Power, impedance, energy, and resistance
- 2. Arc flash
- 3. Circuits

### Topic 3

**Radiation Calculations** 

### Knowledge of:

- 1. Decay
- 2. Half-life
- 3. Source strength

#### Topic 4

**Structural and Mechanical Calculations** 

#### Knowledge of:

- 1. Loading and storage capacity
- 2. Rigging and load

### Topic 5

**Engineering Control Calculations** 

### Knowledge of:

- 1. Ventilation and system design
- 2. Fire suppression and system design
- 3 Noise
- 4. Climate conditions (e.g., WBGT, wind chill, heat stress)
- 5. Fall protection

### Topic 6

**Physics Calculations** 

- 1. Movement (e.g., acceleration, velocity, momentum)
- 2. Friction
- 3. Kinetic and potential energy
- 4. Gas laws

### Topic 7

### **Financial Principles**

#### Knowledge of:

- 1. Cost benefit analysis (e.g., cost of risk)
- 2. Life cycle cost
- 3. Net present value
- 4. Return on investment

### Topic 8 Statistics

#### Knowledge of:

- 1. Descriptive statistics (e.g., central tendency, variability)
- 2. Correlational statistics (e.g., Pearson's r, Spearman's rho)
- 3. Inferential statistics (e.g., chi-square, t-test)
- 4. Probability (e.g., odds of success, Poisson)

### Topic 9

### **Performance Metrics and Indicators**

### Knowledge of:

- 1. Lagging indicators (e.g., incidence rates, lost time, direct costs of incidents)
- 2. Leading indicators (e.g., inspection frequency, safety interventions, employee performance evaluations, training frequency, near miss, near hit, and close call reporting)
- 3. Effects of losses

### **Domain 2**

Safety Management Systems • 23%

#### Topic 1

### **Risk Management and Hazard Control Process**

### Knowledge of:

- 1. Identification methods
- 2. Risk analysis and examination
- 3. Selection of control methods (e.g., financial justification, hierarchy of controls)
- 4. Implementation of controls
- 5. Monitoring and reevaluation
- 6. Risk transfer (e.g., insurance, incident management)

### Topic 2

### **Management Processes**

### Knowledge of:

- 1. Emergency, crisis, disaster response planning, business continuity
- 2. Incident investigation (e.g., data collection, analysis)
- 3. Inspections and audits

### Topic 3

### **Project Management**

- 1. Evaluation of cost, schedule, performance, and risk
- 2. Assigning responsibilities and accountability

### Topic 4 System Safety

### Knowledge of:

- 1. Risk analysis methods (e.g., job safety analysis, hazard and operability analysis, failure mode and effects analysis, fault tree analysis, fishbone, what-if and checklist analysis, change analysis)
- 2. Process safety management

### Topic 5 Fleet Safety

#### Knowledge of:

- 1. Driver behavior (e.g., defensive driving, distracted driving)
- 2. Vehicle inspections
- 3. Safety features (e.g., restraint systems, automatic and anti-lock braking systems)
- 4. Crash and collision investigation

### Topic 6

### **Safety Programs**

### Knowledge of:

- 1. Hazard Communication and Globally Harmonized System
- 2. Workplace violence
- 3. Control of hazardous energy
- 4. Excavation, trenching, and shoring
- 5. Confined space
- 6. Physical security
- 7. Fall protection
- 8. Wellness programs
- 9. Substance abuse

### Domain 3

Ergonomics • 13%

### Topic 1

#### **Human Factors**

### Knowledge of:

- 1. Fitness for duty
- 2. Organizational, behavioral, and psychological influences
- 3. Stressors
- 4. Risk factors (e.g., repetition, force, posture, vibration)
- 5. Work design
- 6. Aging workforce

### Topic 2

#### **Measurement and Monitoring**

- 1. Quantitative methods (e.g., anthropometry, NIOSH lift equation)
- 2. Qualitative methods (e.g., Rapid Upper Limb Assessment [RULA], Rapid Entire Body Assessment [REBA])

### Topic 3 Controls

### Knowledge of:

- 1. Material handling (e.g. manual, powered equipment, lifting devices)
- 2. User-centered design
- 3. Human-machine interface
- 4. Work practice controls (e.g., job rotation, work hardening)
- 5. Written plans, procedures, and training

### **Domain 4**

Fire Prevention and Protection • 11%

### Topic 1

Fire and Explosion Hazards

### Knowledge of:

- 1. Chemical
- 2. Electrical (e.g., static electricity, surge)
- 3. Natural hazards (e.g., lightning, flooding, drought)
- 4. Structural (e.g., combustible, non-combustible)
- 5. Mechanical (e.g., heat generated by friction)
- 6. Hot work (e.g., welding, cutting, brazing)

### Topic 2

**Fire Controls** 

### Knowledge of:

- 1. Fire Science (e.g., combustible dust fire pentagon, fire triangle, fire tetrahedron)
- 2. Detection
- 3. Suppression
- 4. Segregation and separation (e.g., flammable materials storage, ventilation)
- 5. Housekeeping
- 6. Grounding and bonding

#### Topic 3

**Fire and Emergency Management** 

### Knowledge of:

- 1. Written plans, procedures, and work practices (e.g., Incident Command system, fire brigade)
- 2. Life safety (e.g., elements of design)

### **Domain 5**

Occupational Health • 11%

### Topic 1

**Biological Hazards and Controls** 

- 1. Sources (e.g., viral, bacterial, parasitic, fungus)
- 2. Exposure assessment
- 3. Control strategies

### Topic 2

#### **Chemical Hazards and Controls**

### Knowledge of:

- 1. Sources (e.g., assessment, control strategies, symptoms, target organs)
- 2. Exposure limits (e.g., PELs, TLVs, STELs, RELs)
- 3. Routes of entry (e.g., inhalation, ingestion, absorption, injection)
- 4. Acute and chronic exposures
- 5. Incompatibilities and reactivity of agents
- 6. Nano-technology

### Topic 3

### **Physical Hazards and Controls**

### Knowledge of:

- 1. Noise
- 2. Vibration
- 3. Radiation
- 4. Electrical

### **Domain 6**

### Environmental Management • 15%

### Topic 1

#### **Environmental Hazards**

### Knowledge of:

- 1. Disaster preparedness (e.g., manmade, natural)
- 2. Environmental hazards awareness (e.g., biological [mold], chemical, waste, vermin)
- 3. Remediation
- 4. Water (e.g., storm, waste, permitting)
- 5. Air (e.g., quality, IAQ, permitting)
- 6. Land and conservation (e.g., solid waste, recycling, sustainability)

### Topic 2

### **Engineering Controls**

### Knowledge of:

- 1. Air Pollution
- 2. Segregation and separation
- 3. Substitution and selection of alternative design strategies
- 4. Hazardous materials containment and design
- 5. Water pollution
- 6. Above ground (AST) and underground (UST) storage tanks
- 7. Ventilation (e.g., HVAC, local exhaust)
- 8. Land pollution

### Topic 3

### **Administrative Controls and Practices**

- 1. Conservation (e.g., reuse, recycle, reduce)
- Housekeeping
- 3. Warnings (e.g., signs, signals)
- 4. Written plans, procedures, work practices (e.g., decontamination)
- 5. Environmental management system standards
- 6. Sustainability

### Topic 4

#### **Hazardous Waste Storage and Disposal**

### Knowledge of:

- 1. Transportation (e.g., placarding, manifesting)
- 2. Storage and documentation
- 3. Spill prevention, containment, and response
- 4. Waste removal, treatment, and disposal

### **Domain 7**

Training, Education, and Communication • 9%

### Topic 1

**Training and Education Methods** 

### Knowledge of:

- 1. Adult learning theory and techniques
- 2. Data collection, needs analysis, and feedback
- 3. Behavior and performance modification
- 4. Presentation tools (e.g., computer based, group meeting)
- 5. Assessing competency

### Topic 2

**Communication and Group Dynamics** 

- 1. Interpersonal communication (e.g., cross generation)
- 2. Methods of facilitating teams
- 3. Multidisciplinary teamwork
- 4. Negotiation strategy
- 5. Conflict resolution
- 6. Mentoring

### **CHAPTER 6** | EXAM SAMPLE QUESTIONS



### **Examination Item Samples**

The following items illustrate only the style and format typical of items on the ASP examination. Not all ASP examination domain areas are represented by these sample items. Please note it is essential for you to read and understand the ASP examination blueprint found in Chapter 5 so you have a complete awareness of the depth and breadth of all of the subject matter appearing on the actual ASP examination.

Note: None of the following items are on the examination nor do they reflect specific content.

- Isopropyl alcohol has a flammability range between 2% and 12%, therefor the Upper Explosive limit is:
  - A. 24% alcohol at sea level.
  - B. 6% alcohol in air.
  - C. 24% alcohol at atmosphere.
  - D. 12% alcohol in air.
- 2. This hazard control methodology can occur before, during or after a process, especially in a more dynamic facility.
  - A. Safety system review
  - B. Process Safety Management (PSM)
  - C. Linear probability review
  - D. Engineering systems resolution.
- **3.** Workers should receive training on the which of the following components regarding workplace violence?
  - A. Relevant policies, locations of physical defense equipment, self-defense behaviors, and how to help during emergencies
  - B. Relevant policies, diffusing difficult situations, location of attack alarms and how to respond to attacks
  - C. Relevant policies and the local laws and requirements of civil order (police, military, or civil patrol)
  - D. Relevant policies, security equipment, diffusion of threatening situations, and how to summon help

- 4. The NIOSH recommended weight limit represents the maximum weight of a load that may be lifted or lowered by about what percent of American industrial workers?
  - A. 90 percent
  - B. 96 percent
  - C. 85 percent
  - D. 98 percent
- 5. Friction generated fire hazards are best avoided when using:
  - A. lubrication.
  - B. a preventative maintenance program.
  - C. metals compatible systems.
  - D. certified maintenance contractors.
- 6. What program defines the operation, management and structural components through the life cycle of an emergency fire incident?
  - A. Fire brigade
  - B. Incident command system
  - C. Emergency response program
  - D. Business continuity plan

- 7. Research studies where animals are subjected to a hazardous concentration of a material and then half of those animal die from that concentration provide what determination?
  - A. LD50
  - B. Material's half life
  - C. 8-hour time weighted allowable exposure
  - D. Dose-response at 50 percent.
- **8.** Gravity settlers, cyclones and electrostatic precipitators are examples of:
  - A. water pollution controls.
  - B. air moisture monitors.
  - C. air particulate controls.
  - D. water solubility measures.
- **9.** The best practices waste management control hierarchy include:
  - A. elimination, control and disposal.
  - B. recycling, treatment and disposal.
  - C. prevention, recycling, treatment and disposal.
  - D. prevention, elimination, incineration, disposal.

### **Answer Key**

- 1. D 4. A 7. A
- 2. B 5. B 8. C
- 3. D 6. B 9. C

# CHAPTER 7 | AFTER ACHIEVING CERTIFICATION



# Features and Benefits of Obtaining BCSP Credentials

Wallet Card. Upon certification and each year when you pay the required annual renewal fee, a wallet card is made available which shows you are certified. The wallet card is the official documentation of certification. You will have access to print your wallet card instantly from your profile.

**Wall Certificate.** When you achieve the ASP credential, BCSP issues a wall certificate suitable for framing. Should you lose or damage your wall certificate, BCSP will replace it for a nominal fee. Visit "My Profile" at on the BCSP website to order.

Access to BCSP's Career Center. Many employers post open job positions seeking qualified safety professionals. With a BCSP credential, you may post your resume online and employers have access to view your resume and contact you if you wish.

BCSP eNewsletter Subscription. As a BCSP certificant, you will receive the quarterly BCSP eNewsletter. The BCSP eNewsletter contains information about important changes which may affect BCSP certifications and designations, information about certificate holders, and professional safety practice information. Current issues and back issues are located on the BCSP website.

**BCSP Annual Report.** The BCSP Annual Report is another important publication you will receive electronically. It contains summarized data about ASPs and the annual audited financial report and can be found on the BCSP website at bcsp.org/About.

**BCSP Directories.** BCSP publishes directories of individuals who currently hold BCSP certifications and designations. An abbreviated format, containing names, cities, and states, appears on the BCSP website and allows viewers to confirm if a person currently holds a BCSP certification or designation.

**eSafetySource Registration.** BCSP offers the opportunity for BCSP certification and designation holders to register on the electronic safety source registry, indicating their areas of specialization.

Membership Level. Individuals may use the ASP credential to qualify for the highest level of membership in professional safety societies. After achieving the ASP credential, check with the safety and health organizations in which you hold memberships to see if you qualify for a status change.

Title Protection and Laws Involving the BCSP Credentials. Some states have enacted title protection laws which restrict anyone from claiming to hold a BCSP certification without having duly obtained them from BCSP. Additionally, several states have enacted laws or regulations which specify that ASPs may provide loss control services for insurance companies. Check your state government website for more details.

### Use of the ASP Title

It is important to know how to use your ASP title correctly. The "Associate Safety Professional" title and the letters "ASP" are registered certification marks issued to BCSP by the U.S. Patent and Trademark Office. They can only be used when authorized for a period specifically designated by BCSP. There are guidelines for displaying your ASP credential properly.

Examples of correct use:

- · Robert A. Smith, ASP
- Robert A. Smith, Associate Safety Professional

The ASP credential is awarded to individuals, not companies, and should only be used with individuals' names.

The ASP credential may be used only for the period for which use is authorized. Use expires if you have not paid the annual renewal fee or have not met recertification requirements for the ASP. Use of these titles beyond the

authorized period (without complying with renewal or recertification requirements) constitutes unauthorized use of the credential.

You may use the credential on your business cards, resume, and correspondence or with your signature. You may use your ASP credential virtually anywhere you use your name.

Example of proper company use:

ABC Safety Company provides the latest safety services. Employees holding the Associate Safety Professional® (ASP®) certification include Robert A. Smith, ASP and Mary A. Jones, ASP.

Example of improper company use:

ABC Safety Company, providing safety services by Associate Safety Professionals.

### **Maintaining Your Certification**

In order to retain your certification, you must:

- Inform BCSP when your mail or email address changes
- Pay your annual fee
- Complete recertification requirements

**Changing Your Name.** If you change your name through marriage or other court proceedings, you may request a name change by contacting *bcsp@bcsp.org*. Additionally, you must provide a copy of the court record or marriage certificate in order for BCSP to register the change.

Paying Your Annual Renewal Fee. The authority to use the ASP title is valid for one year. It must be renewed annually. You will receive a prorated fee for the remainder of the year in which you pass the examination. Each following year, BCSP will send you a notice when your annual renewal fee is due. BCSP gives you several options for paying the fee online via a credit card or by phone. After receiving your payment, BCSP will have a receipt and wallet card available to print. For a list of current fees, visit bcsp.org/Certifications/Safety-Certifications-at-a-Glance.

**Meeting Recertification Requirements.** The recertification program helps ASPs keep up with changes affecting professional safety practice. The program complies with requirements of BCSP's national accrediting organizations.

Every five years (one cycle) you must achieve 25 points. There are ten categories of activities, each providing points toward meeting that goal. Keep in mind, there is no limit to the number of points in some categories, while other categories have annual and/or total point limits.

At the end of the five-year period, you must submit the points you earned during that cycle. Only points earned during a recertification cycle count toward that cycle. BCSP randomly selects 5% of those who submit their points for an audit. While documentation to prove points is not required with the initial submission, the audit procedure requires you have proof of the points claimed. It is important that you keep records to verify your recertification activities.

Additional details of the recertification program appear in the *Recertification Guide*. You may download the *Recertification Guide* on the BCSP website to help you through the process. You will want to refer to the website regularly for the most up-to-date information.

### Reinstatement

If you fail to pay your annual renewal fee on time or fail to achieve the required recertification points every five years, BCSP will send you a notice that your credential has been invalidated and you no longer hold the ASP.

You may seek reinstatement online through "My Profile" at bcsp.org. Reinstatement must be by 12/31 of the same year you are invalidated. Reinstatement includes paying a reinstatement fee and complying with the current recertification requirements. Otherwise, you will be required to apply as a new candidate and meet all of the requirements in place at the time of your application.

### **Career Interruptions**

While holding the ASP credential, you may face situations which affect your ability to maintain your certification. You may experience an interruption in your safety career, such as moving to a job which is not in the safety profession, taking time out to be a parent, student or soldier, having an extended health problem, or being unemployed. BCSP has established some options to help deal with these types of situations.

**Leave of Absence and Extensions.** You may seek a leave of absence or an extension if a career interruption will affect your ability to meet recertification requirements. Please refer to the *Recertification Guide* for detailed information.

### Annual Renewal Fee Waiver While Unemployed.

If you become unemployed and are unable to pay your annual renewal fee, you may request in writing a one-time waiver of the annual renewal fee.

### **Retired ASPs**

Certificants who are retiring can hold their certifications in retired status should they meet the following requirements:

- They have held certification a minimum of ten (10) years.
- They have completed two (2) recertification cycles.

To maintain a certification in retired status:

- Safety practice is not required.
- No more than 200 hours of safety practice annually is allowed.
- A Retired Annual Renewal Fee is required each year (beginning with 2018 renewal(s)).

A certificants holding a certification in retired status must indicate their status as in the following examples:

- Robert A. Smith, ASP Retired
- Robert A. Smith, ASP (Retired)
- Robert A. Smith, ASP Ret.
- Robert A. Smith, Associate Safety Professional (Retired)

### **Protecting the ASP Credential and Logo**

Because BCSP has registered its logos and titles, it has a solid position for challenging BCSP title and/or logo infringement. There are several legal theories and considerations involved. Registration itself does not provide absolute protection from others using similar acronyms or titles. BCSP does not have exclusive use of the acronym. BCSP continually challenges those uses which can be confusing to the public or for which there are legal grounds to make such challenges.

# Individuals Using the ASP Credential Without Authority

BCSP has established procedures for challenging individuals known to use the Associate Safety Professional credential without having obtained it or after they lost it for failure to pay annual renewal fees or meet recertification requirements.

In order to establish someone is using the credential without authority, BCSP must have the original document (or a copy) showing where the individual is using the title. Most often the unauthorized use occurs online, on a business card, resume, business letterhead, brochure or similar publication, or with a signature. To initiate action against the individual using the credential without authority, BCSP also needs the individual's current mailing address.

BCSP relies on those finding potential unauthorized uses to report them and provide the documentation showing the use of these titles. BCSP will not disclose the name of the person or organization reporting potential unauthorized uses.

After receiving documentation of a potential unauthorized use case, BCSP takes steps to challenge that individual and seeks to correct any record-keeping error on the part of BCSP. Legal counsel for BCSP may participate in the procedures.

Those who have used BCSP titles without authority may be barred from pursuing the ASP certification for five years. Their names are also published on the BCSP website. Other penalties may be applied. BCSP reserves the right to use the courts in protecting use of the ASP credential.

### **Criminal Convictions**

BCSP's criminal conviction policy appears on the BCSP website. It applies to BCSP certification holders. The policy also covers convictions by other certifications and licensing bodies for unauthorized use of designations. It requires ASPs to report new convictions which can result in BCSP disciplinary proceedings.

### **Discipline Procedures**

BCSP authorizes individuals to use the ASP credential when they meet requirements for achieving and retaining the credential. BCSP also has a responsibility to withdraw that authorization if individuals fail to pay annual renewal fees, fail to meet recertification requirements, or violate BCSP Disciplinary Action Policy or the BCSP Code of Ethics. The BCSP Disciplinary Action Policy contains rules on disciplinary procedures and grounds for action. The complete BCSP Disciplinary Action Policy is located at bcsp.org/About.

### **Appeals**

You may appeal decisions related to earning and maintaining BCSP credentials. Requests for appeal must be submitted to the Chief Executive Officer in writing and in accordance to the current appeals policy located online at bcsp.org/About.

### **Promoting the ASP**

BCSP uses several methods to promote the ASP credential and to encourage safety professionals to pursue it. You may volunteer to assist in these activities. Please contact BCSP or visit the BCSP website to determine what materials are available.

Request a Returnable Banner Display. Use of BCSP banner displays helps promote BCSP and the ASP certification. They are ideal for meetings, local and regional conferences or educational programs of local professional groups and companies. BCSP pays for shipping to and from events. Some instances may earn recertification credit for promoting the ASP. To request a display, fill out the Display and Literature Request Form located at bcsp.org/Resources/Articles-Presentations, or contact BCSP.

**Promotional Materials.** There is a variety of complimentary literature about all of the BCSP credentials, qualifications and procedures, and examinations. Most BCSP publications are available on the BCSP website as downloadable PDFs. To request literature, please fill out the Display and Literature Request Form located at bcsp.org/Resources/Articles-Presentations, or contact BCSP.

**Presentation Materials.** PowerPoint presentations about the safety profession and the BCSP credentials are located on the BCSP website at bcsp.org/Resources/Articles-Presentations.

**Mentor Program.** Created specifically to recognize certificants' roles in assisting the career development of others, the mentor program helps bring current credential holders and those looking to pursue certification together.

The mentor program rewards those who become mentors and ensures safety professionals who perform quality work are certified. By having your mentee fill out the Professional Advancement Mentor Form and submit it by fax or email at the time that they apply online, BCSP recognizes mentors and their work with their peers, colleagues, and other safety professionals. More information can be found at bcsp.org/Resources/Mentoring.

### **Maintaining Your Mail and Email Address**

As an ASP, you are solely responsible to keep BCSP informed of your current mail and email address. If either address changes, you must notify BCSP. You could lose the ASP certification if annual renewal notices and other important information do not reach you.

# BCSP Board of Certified Safety Professionals

# Code of Ethics

This code sets forth the code of ethics and professional standards to be observed by holders of documents of certification conferred by the Board of Certified Safety Professionals. Certificants shall, in their professional activities, sustain and advance the integrity, honor, and prestige of the profession by adherence to these standards.

#### **Standards:**

- HOLD paramount the safety and health of people, the protection of the environment and protection of property in the performance of professional duties and exercise their obligation to advise employers, clients, employees, the public, and appropriate authorities of danger and unacceptable risks to people, the environment, or property.
- 2. BE honest, fair, and impartial; act with responsibility and integrity. Adhere to high standards of ethical conduct with balanced care for the interests of the public, employers, clients, employees, colleagues and the profession. Avoid all conduct or practice that is likely to discredit the profession or deceive the public.
- 3. ISSUE public statements only in an objective and truthful manner and only when founded upon knowledge of the facts and competence in the subject matter.
- 4. UNDERTAKE assignments only when qualified by education or experience in the specific technical fields involved. Accept responsibility for their continued professional development by acquiring and maintaining competence through continuing education, experience, professional training and keeping current on relevant legal issues.

- 5. AVOID deceptive acts that falsify or misrepresent their academic or professional qualifications. Not misrepresent or exaggerate their degree of responsibility in or for the subject matter of prior assignments. Presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers, employees, associates, or past accomplishments with the intent and purpose of enhancing their qualifications and their work.
- 6. CONDUCT their professional relations by the highest standards of integrity and avoid compromise of their professional judgment by conflicts of interest. When becoming aware of professional misconduct by a BCSP certificant, take steps to bring that misconduct to the attention of the Board of Certified Safety Professionals.
- 7. ACT in a manner free of bias with regard to religion, ethnicity, gender, age, national origin, sexual orientation, or disability.
- 8. SEEK opportunities to be of constructive service in civic affairs and work for the advancement of the safety, health and wellbeing of their community and their profession by sharing their knowledge and skills.









#### BOARD OF CERTIFIED SAFFTY PROFESSIONALS

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