



EXAMINATION BLUEPRINT CHANGES IN 2024

Every five years, or more often if necessary, BCSP revalidates all certification examinations. During the revalidation process, a new blueprint is created that reflects the consensus of the profession as to the key elements a minimally qualified candidate must possess to be deemed competent.

The Construction Health and Safety Technician® (CHST®) examination began its revalidation process in 2022, and a new blueprint was generated. The following is a synopsis of the changes:

- Overall, the majority of the concepts identified in the current blueprint carried over to the new blueprint; however, there was some content addition in each domain, leading to a more balanced blueprint.
- In Domain 1, renamed *Hazard and Risk Identification and Control*, knowledge of fall protection, mechanized equipment, common biological hazards, and concrete work was added. In addition, skills associated with selecting instruments designed for measuring a particular hazard and equipment or apparel designed to protect the wearer or user from a recognized hazard were also added.
- In the expanded Domain 2, which now covers *Emergency Preparedness, Incident Investigation, and Response*, skills associated with emergency mitigation, action plans, responses, and coordination were added. In addition, skills to make notifications using established communication processes and facilitating and evaluating emergency response exercises were included.
- In Domain 3, renamed *Safety Program Development, Implementation, and Sustainment*, a few of the existing statements were combined to be more encompassing, while knowledge of proper equipment use, including referencing manufacturers' manuals and incorporating directives, recommendations, or options was added.
- In Domain 4, *Leadership, Communication, and Training*, knowledge of risk management and leadership strategies was added. In addition, skills to recognize and address total worker health and completing risk reduction activities were included.
- While only a small amount of content changed in each domain, the percentage of the exam represented by each domain shifted significantly. Domain 1 decreased to 36.6%, with Domain 2 increasing to 19.9%, Domain 3 to 22.5%, and Domain 4 to 21.0%.

The new CHST blueprint is tentatively expected to be effective by August 1, 2024.



Domain 1

Hazard and Risk Identification and Control • 36.6 %

Knowledge of:

1. Common hazards and controls associated with hot work
2. Common electrical hazards and controls
3. Common hazards and controls associated with excavations
4. Common hazards and controls associated with working at heights
5. Common hazards and controls associated with fall protection, arrest, and restraint equipment
6. Common hazards and controls associated with working in confined spaces
7. Common struck-by hazards and associated controls
8. Common hazards of mechanized equipment and associated controls
9. Common hazards and controls associated with hoisting and rigging
10. Common hazards and controls associated with crane operations
11. Common hazards and controls associated with material handling
12. Common hazards and controls associated with material storage
13. Common hazards and controls associated with housekeeping
14. Common hazards and controls associated with powder-actuated tools
15. Common hazards and controls associated with hand and power tools
16. Common hazards and controls associated with asbestos exposure
17. Common hazards and controls associated with lead and heavy metals exposure
18. Common hazards and controls associated with noise exposure
19. Common hazards and controls associated with radiation exposure
20. Common hazards and controls associated with silica exposure
21. Common hazards and controls associated with chemical exposure
22. Common hazards and controls associated with working in extreme climates
23. Common hazards and controls associated with vibration and impact exposures
24. The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)
25. Safety through design
26. Risks associated with multiple trades working simultaneously in work area
27. Principles of ergonomics as applied to construction practices
28. Requirements, usage, and limitations of personal protective equipment
29. Basic testing and monitoring equipment
30. Common biological hazards and controls
31. Common hazards and controls associated with concrete work

Skill to:

1. Prevent or correct hazards by applying a hierarchy of controls
2. Develop job hazard/safety analyses
3. Address identified hazards and prioritize corrective action based on level and frequency of risk
4. Select instruments designed for measuring a particular hazard
5. Select equipment or apparel designed to protect the wearer or user from a recognized hazard



Domain 2

Emergency Preparedness, Incident Investigation, and Response • 19.9%

Knowledge of:

1. Proper fire protection and prevention methods
2. Components of emergency action plans
3. Common elements of response plans for environmental contamination hazards
4. Emergency response - incident command system
5. Emergency response - crisis management
6. Emergency response - emergency response equipment
7. Basic first aid or medical needs
8. Universal precautions

Skill to:

1. Prepare a site for emergency mitigation
2. Prepare a site emergency action plan
3. Respond to an emergency and resume operations after the emergency
4. Coordinate an emergency situation
5. Make notifications using established communication processes
6. Identify when emergency services mitigation is required
7. Facilitate and evaluate emergency response exercises

Domain 3

Safety Program Development, Implementation, and Sustainment • 22.5%

Knowledge of:

1. Applicable health, safety, and environmental standards
2. Common components of site-specific safety plans
3. Worksite inspections and/or audit processes
4. The impact of regulatory authority on roles and responsibilities
5. Proper equipment use; importance of referencing manufacturers' manuals and incorporating directives, recommendations, or options found therein
6. Basic risk management concepts
7. Data gathering, documentation, and recordkeeping requirements
8. Techniques for determining incident or accident causation
9. Post-incident/accident reporting and follow-up procedures

Skill to:

1. Identify which health and safety programs are relevant to site-specific safety plan
2. Apply relevant standards to worksite conditions
3. Identify trends related to incidents and accidents
4. Evaluate construction means and methods and their impact on safety



Domain 4

Leadership, Communication, and Training • 21%

Knowledge of:

1. Available training delivery methods and instructional material
2. Appropriate human behavior motivation methods and techniques
3. Communication strategies
4. When to consult with equipment manufacturers, suppliers, or subject matter experts
5. Information confidentiality requirements
6. Leading risk management strategies and techniques
7. Leadership strategies

Skill to:

1. Develop site-specific safety training requirements based on job tasks and work environment
2. Manage applicable documents
3. Identify existing and foreseeable at-risk conditions and behaviors
4. Recognize situations or behaviors that present danger
5. Access relevant and current information
6. Recognize and address total worker health
7. Complete risk reduction activities