



## Special Hazards Systems

### Level IV Content Outline

#### Senior Engineering Technician

The candidates for NICET certification at Level IV in Special Hazards Systems should have the knowledge, experience and skills needed to work in the industry. They design systems involving unique applications of agents/devices, and/or explosion prevention. They troubleshoot complex systems, manage multiple project teams, and negotiate contracts. Level IV technicians have at least 10 years of experience in special hazards systems.

#### 4.1 System Design and Configuration

(Questions related to these tasks make up 42-48% of the exam.)

- 4.1.1 Communicate with an NFPA committee regarding standards. <sup>1</sup>
- 4.1.2 Design a complex foam system. <sup>1, 3</sup>
- 4.1.3 Implement protection of a dust control system and/or equipment. <sup>9</sup>
- 4.1.4 Design a low-pressure CO<sup>2</sup> system. <sup>2</sup>
- 4.1.5 Coordinate and implement the application of explosion prevention systems (other than dust control equipment). <sup>2</sup>
- 4.1.6 Develop installation specifications, taking into account manufacturer's instructions and any site-specific requirements. <sup>6</sup>

#### 4.2 Work Management

(Questions related to these tasks make up 40-46% of the exam.)

- 4.2.1 Accommodate LEED (Leadership in Energy & Environmental Design) requirements. <sup>8</sup>
- 4.2.2 Present performance-based design alternatives to Engineers/AHJs. <sup>1, 2, 4</sup>
- 4.2.3 Educate AHJs and insurance authorities about special hazards work. <sup>2</sup>
- 4.2.4 Conduct cost and benefits research to determine the feasibility of using new agents and other products. <sup>2</sup>
- 4.2.5 Negotiate and review project contracts. <sup>5, 6</sup>
- 4.2.6 Develop a project budget. <sup>6, 7</sup>
- 4.2.7 Monitor project cost-control. <sup>5, 6</sup>

#### 4.3 Safety

(Questions related to these tasks make up 4-11% of the exam.)

- 4.3.1 Manage compliance with OSHA and insurance carrier (Bureau of Workers' Compensation) safety requirements. <sup>5, 6</sup>

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