



EngineeringAdvantage™ Educational Modules

These modules are made available from our construction related programs and provide educational value to firms involved in the construction business.

Module Name	Description	Fire	Security
<input type="checkbox"/> Life Safety Interfaces	Module covers issues and design considerations of fire alarm system integration with other building systems for emergency control functions. Module includes components related to interfacing various life safety systems and control devices. Topics include; relays, intelligent devices, elevator recall, GUIs, HVAC interfacing and foreign systems. ★	●	◐
<input type="checkbox"/> CCTV System Design Considerations	Overview of various options available for a custom CCTV solution. Topics include; terms and definitions, system performance goals, target selection, lenses & cameras, topology planning & connectivity, transmission & storage, video analysis, integration, and intelligent response. ★	◐	●
<input type="checkbox"/> ECS Integration with Building Systems	This module provides a greater focus on intelligent response solutions. Topics include; Terms and Definitions, ECS Overview, Drivers, Risk Assessment per NFPA 72, Circuit Integrity Requirements, Common Interface Options, Applications and Benefits. ★	◐	●
<input type="checkbox"/> Fire and Security Alarm Communication Methods	Cover an overview of various signaling options for event reporting. Topics include; Terms and definitions, history and background, NFPA 72 communication requirements, older technological solutions, DACTS and DACRS, IP communicators, wireless mesh technology overview, network planning and connectivity, and future developments. ★	●	●
<input type="checkbox"/> Fire Detection Technologies	Covers fire detection technologies application guidelines for successful design. Topics include; fire principles, current detection technologies, code updates-NFPA 72-2010 chapter 17, construction challenges, application solutions, and future detection technologies. ★	●	◐
<input type="checkbox"/> NFPA 72-2010 Overview	This module focuses on the significant code updates made in NFPA 72 2010. Topics include; fundamentals, circuit & pathways, inspection and testing, initiating devices, notification appliances, emergency control functions, protected premises, emergency communication, systems (ECS), details on ECS, review of MNS challenges, supervisory station, public reporting, and household. ★	●	◐
<input type="checkbox"/> Intelligibility in ECS	Covers concepts for successful planning and implementation of intelligibility. Topics include; definitions and goals, intelligibility overview, sound characteristics, codes and standards, planning phase, technologies, application solutions, verification methods and available resources. ★	●	●
<input type="checkbox"/> Mass Notification Overview	Covers concepts for successful planning and implementation of mass notification systems (AKA Emergency Communication Systems). Topics include; drivers, customers / stakeholders, codes and standards, planning phase, technologies, challenges and application solutions. ★	●	●
<input type="checkbox"/> Building Information Management (BIM)	This module covers introduction and potential impact to system design workflows from BIM. Topics include; terms and definitions, typical project design cycle, introduction to building, information modeling, workflow impact, BIM implementation, BIM software options, sources of equipment models and information on resources. ★	●	●
<input type="checkbox"/> Fire Detection Industry Innovations	Covers emerging technologies in fire detection and signaling systems. Topics include; fire alarm industry overview, drivers for change, early warning smoke detection, improved photoelectric smoke detection methods, co detection, video smoke detection, gas detection improvements, monitored fire extinguisher technology and the value of smoke detection. ★	●	◐
<input type="checkbox"/> Clean Agent Extinguishing Overview	Covers business continuity and the environment as it pertains to clean agent extinguishing systems. Topics include; history, definitions, fire suppression principles, fire suppression, development timeline, codes, and standards, business continuity, clean agents and special, hazard systems, design and construction issues, and applications. ★	●	○
<input type="checkbox"/> Smoke Control Overview	Module covers smoke control design considerations and fire alarm system integration. Topics include; definitions, concepts, system equipment, codes and standards, building application, (design considerations), certification, maintenance, and periodic evaluation. ★	●	◐
<input type="checkbox"/> Networking Fire Systems	Focused on the topic of fire systems networking using the highest end system available. Topics include; design challenges, codes & standards requirements, media overview, FireFinder XLS communication details, strategies for a successful design and performance criteria. ★	●	◐
<input type="checkbox"/> Emergency Responder Radio Coverage Systems	Focused on codes, standards and equipment related to radio coverage systems. Topics include; understanding the benefits vs. hard wired systems, codes & standards requirements, components and methods to increase coverage, ensuring reliable operation of the radio system, supervision and power, commissioning, and system application solutions. ★	●	◐

Symbol Legend: ★ CPDs towards NICET and possible CEUs

