



Commissioning Process and Integrated Testing of Fire Protection and Life Safety Systems

عملية التشغيل والاختبار المتكامل لأنظمة الحماية من الحرائق وسلامة الحياة

25 – 29 February 2024

Al Khobar / KSA

Introduction

Fire protection and life safety systems are essential for the protection of people, property and the environment from fire and other hazards. However, these systems need to be properly designed, installed, commissioned and tested to ensure their reliability and effectiveness. This training course will provide the participants with the knowledge and skills to perform commissioning and integrated testing of fire protection and life safety systems in accordance with the relevant standards and best practices.

Objectives

By the end of this training course, the participants will be able to:

- Understand the principles and objectives of commissioning and integrated testing of fire protection and life safety systems
- Identify the roles and responsibilities of the commissioning team members and stakeholders
- Apply the commissioning process and documentation for fire protection and life safety systems
- Conduct functional performance tests and integrated system tests for fire protection and life safety systems
- Troubleshoot and resolve common issues and problems during commissioning and testing
- Evaluate and verify the performance and compliance of fire protection and life safety systems

Who Should Attend?

This training course is suitable for:

- Fire protection engineers, consultants, contractors and installers
- Fire safety managers, officers, inspectors and auditors
- Building owners, operators, managers and maintenance personnel
- Architects, designers, planners and project managers\
- Regulatory authorities, code officials and standards developers

Course Outline

Day One

Introduction to Commissioning and Integrated Testing of Fire Protection and Life Safety Systems

- Overview of fire protection and life safety systems
- Benefits and challenges of commissioning and integrated testing
- Standards, codes and guidelines for commissioning and integrated testing
- Commissioning team composition, roles and responsibilities
- Commissioning plan development and implementation

Day Two

Commissioning Process for Fire Protection and Life Safety Systems

- Design review and verification
- Installation inspection and verification
- Pre-functional checklists and procedures
- Functional performance tests (FPTs) for individual systems
- FPT methods, tools and equipment
- FPT documentation, reporting and acceptance

Day Three

Integrated System Testing for Fire Protection and Life Safety Systems

- Integrated system testing (IST) concept and objectives
- IST scenarios, procedures and protocols
- IST methods, tools and equipment
- IST coordination, communication and control
- IST documentation, reporting and acceptance

Day Four

Troubleshooting and Problem Solving during Commissioning and Testing

- Common issues and problems during commissioning and testing
- Root cause analysis techniques
- Corrective actions and solutions
- Verification of corrective actions
- Lessons learned and feedback

Day Five

Evaluation and Verification of Fire Protection and Life Safety Systems

- Performance evaluation criteria and methods
- Compliance verification criteria and methods
- Commissioning report preparation and review
- Commissioning record keeping and archiving
- Commissioning quality assurance and quality control

Training Method

- Pre-assessment
- Live group instruction
- Use of real-world examples, case studies and exercises
- Interactive participation and discussion
- Power point presentation, LCD and flip chart
- Group activities and tests
- Each participant receives a 7" Tablet containing a copy of the presentation, slides and handouts
- Post-assessment

Program Support

This program is supported by interactive discussions, role-play, case studies and highlight the techniques available to the participants.

Schedule

The course agenda will be as follows:

- | | |
|---------------------|------------------|
| • Technical Session | 08.30-10.00 am |
| • Coffee Break | 10.00-10.15 am |
| • Technical Session | 10.15-12.15 noon |
| • Coffee Break | 12.15-12.45 pm |
| • Technical Session | 12.45-02.30 pm |
| • Course Ends | 02.30 pm |

Course Fees*

- **2,120 USD**
**VAT is Excluded If Applicable*

المقدمة

تعد أنظمة الحماية من الحرائق وسلامة الحياة ضرورية لحماية الأشخاص والممتلكات والبيئة من الحرائق والمخاطر الأخرى. ومع ذلك، يجب تصميم هذه الأنظمة وتركيبها وتشغيلها واختبارها بشكل صحيح لضمان موثوقيتها وفعاليتها. ستتزود هذه الدورة التدريبية المشاركين بالمعرفة والمهارات اللازمة لأداء التشغيل والاختبار المتكامل لأنظمة الحماية من الحرائق وسلامة الحياة وفقاً للمعايير وأفضل الممارسات ذات الصلة.

الاهداف

بنهاية هذه الدورة التدريبية، سيكون المشاركون قادرين على:

- فهم مبادئ وأهداف التشغيل والاختبار المتكامل لأنظمة الحماية من الحرائق وسلامة الحياة
- تحديد أدوار ومسؤوليات أعضاء فريق التكليف وأصحاب المصلحة
- تطبيق عملية التكليف والتوثيق لأنظمة الحماية من الحرائق وسلامة الحياة
- إجراء اختبارات الأداء الوظيفي واختبارات النظام المتكامل لأنظمة الحماية من الحرائق وسلامة الحياة
- استكشاف الأخطاء وإصلاحها وحل المشكلات والمشكلات الشائعة أثناء التشغيل والاختبار
- التقييم والتحقق من أداء وامتنال أنظمة الحماية من الحرائق وسلامة الحياة

الحضور

هذه الدورة التدريبية مناسبة لـ:

- مهندسي مكافحة الحرائق والاستشاريين والمقاولين والتركيب
- مديري السلامة من الحرائق والضباط والمفتشين والمدققين
- أصحاب المباني والمشغلين والمديرين وموظفي الصيانة
- المهندسين المعماريين والمصممين والمخططين ومديري المشاريع
- السلطات التنظيمية ومسؤولو القواعد ومطورو المعايير