



Future-Oriented Training and Consulting

ELECTRICAL AND INSTRUMENTATION BIM PROGRAM

Electrical & Instrumentation BIM

with Safety Risk Controls

Equipping teams to model electrical and instrumentation systems that meet safety requirements.

Proven E&I BIM Frameworks Structured frameworks for modeling and safety risk control.	Executive Discussions Case studies, simulations, and executive discussions from real projects.
Electrical BIM Software Exposure Hands-on exposure to electrical BIM software.	Safety-Compliant E&I Models Coordinated models that meet rigorous safety requirements.

CONTACT & HEADQUARTERS

www.lux-vie.com | Email: contact@lux-vie.com | Tel: +33-614620984

Address: 50 AVENUE DES CHAMPS ELYSEES, 75008 PARIS

Program Overview

This program builds practical BIM competency for electrical and instrumentation systems while integrating safety risk controls into the design process.

Through case studies, executive discussions, simulations, and hands-on exposure to electrical BIM software, participants will develop the skills to model and coordinate systems that meet rigorous safety requirements.

Program Objectives

- **Understand BIM for Electrical and Instrumentation:** Grasp how BIM applies to electrical and instrumentation work.
- **Create Electrical and Instrumentation Models:** Build accurate, information-rich models in BIM software.
- **Integrate Safety Risk Controls:** Apply risk controls and safety standards during modeling.
- **Coordinate with Other Disciplines:** Detect and resolve clashes with mechanical and structural models.
- **Extract Compliant Deliverables:** Generate drawings and schedules that meet safety requirements.
- **Sustain Safety-Compliant BIM Practices:** Apply model management and compliance practices long-term.

Target Audience

This program is designed for professionals modeling electrical and instrumentation systems with safety in mind, including:

- **Electrical Engineers** modeling electrical systems in BIM software.
- **Instrumentation & Controls Engineers** modeling instrumentation and controls systems.
- **BIM Coordinators & Modelers** managing models and clash detection.
- **Health & Safety Officers** verifying safety compliance in electrical designs.
- **Project & Construction Managers** overseeing BIM-enabled electrical delivery.
- **IT & Digital Transformation Leaders** rolling out electrical BIM software across teams.
- **Consultants & Compliance Advisors** guiding clients on electrical BIM and safety adoption.

Program Impact

Participants will leave this program with practical electrical BIM skills and safety risk control knowledge. Graduates will return to their organizations ready to model and coordinate systems that meet rigorous safety requirements.

Program Outline

MODULE 1: Foundations of Electrical and Instrumentation BIM

- Core BIM concepts applied to electrical and instrumentation systems
- How E&I BIM differs from other discipline models
- Overview of leading electrical BIM software
- The engineer's role in E&I BIM projects
- Common pitfalls in early E&I BIM adoption

MODULE 2: Creating Electrical and Instrumentation Models

- Modeling power distribution and instrumentation systems
- Attaching data and parameters to E&I components
- Managing model versions and permissions
- Hands-on exposure to electrical BIM software
- Maintaining model accuracy and consistency

MODULE 3: Integrating Safety Risk Controls

- Key safety codes relevant to electrical systems
- Applying hazard identification and risk controls
- Documenting compliance evidence within the model
- Identifying and resolving compliance gaps

MODULE 4: Multi-Disciplinary Coordination

- Federating E&I models with other disciplines
- Running clash detection and resolving conflicts
- Coordinating design changes across teams
- Using coordination and review tools
- Building a coordinated, safety-compliant model set

MODULE 5: Deliverables and Ongoing Practice

- Extracting compliant drawings and schedules
- Monitoring model updates through construction
- Managing handover and as-built documentation
- Sustaining safety-compliant BIM practices beyond the program