

Mastering The Saudi National Electrical Code (SBC 401)

18 – 22 January 2027
Zoom

AGILE LEADERS
Training Center

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Ref: 36311_70916 **Date:** 18 – 22 January 2027 **Location:** Zoom **Fees:** 2500 Euro

Course Overview:

This course is designed to equip professionals with a complete understanding of the Saudi National Electrical Code SBC 401. This course covers essential aspects such as electrical code compliance, safety standards, and installation practices specific to Saudi Arabia. Participants will gain expertise in electrical safety measures, including protection against electric shock, overcurrent, and voltage disturbances, ensuring compliance with Saudi Building Code regulations. Through this training, attendees will enhance their knowledge of electrical equipment selection, system design, and verification processes, crucial for maintaining low-voltage installations and fire protection systems.

Target Audience:

- Electrical Engineers
- Compliance Officers
- Safety Inspectors
- Electrical Inspectors
- Facility Managers
- Maintenance Supervisors

Targeted Organizational Departments:

- Engineering and Maintenance
- Safety and Compliance
- Facilities Management
- Quality Assurance
- Construction and Project Management

Targeted Industries:

- Construction
- Manufacturing
- Oil and Gas
- Utilities
- Real Estate Development

Course Offerings:

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

- Interpret and apply the Saudi National Electrical Code SBC 401
- Ensure compliance with electrical safety standards in Saudi Arabia
- Design and verify electrical systems according to SBC 401
- Implement protection against electric shock, overcurrent, and voltage disturbances
- Conduct thorough inspections and safety checks on electrical installations

Training Methodology:

The course employs a blend of theoretical instruction and practical applications. It includes case studies, group discussions, interactive sessions, and hands-on exercises. Participants will engage in real-world scenarios to apply SBC 401 principles, focusing on electrical safety, system design, and compliance.

Course Toolbox:

- Course Manual and Workbooks
- Access to Online Resources and Code References
- Checklists and Templates for Compliance and Safety Checks

Course Agenda:

Day 1: Introduction to SBC 401 and Electrical Safety Standards

- **Topic 1:** Overview of Saudi National Electrical Code SBC 401
- **Topic 2:** Scope and Fundamental Principles of SBC 401
- **Topic 3:** Characteristics of Electrical Installations
- **Topic 4:** Protection Against Electric Shock: Principles and Practices
- **Topic 5:** Challenges and Opportunities in Electrical Safety Compliance
- **Topic 6:** The Role of Electrical Codes in Modern Infrastructure
- **Reflection & Review:** Key Takeaways and Initial Reflections

Day 2: Electrical System Design and Compliance

- **Topic 1:** Electrical System Design Requirements Under SBC 401
- **Topic 2:** Electrical Equipment Selection and Installation Standards
- **Topic 3:** Overcurrent Protection: Strategies and Best Practices
- **Topic 4:** Voltage Disturbances and Electromagnetic Compatibility
- **Topic 5:** Ensuring Safety in Low Voltage Installations
- **Topic 6:** Regulatory Framework and Compliance Challenges in Saudi Arabia
- **Reflection & Review:** Day's Learnings and Practical Applications

Day 3: Advanced Electrical Safety Measures

- **Topic 1:** Protection Against Thermal Effects and Fire Hazards
- **Topic 2:** Ensuring Safety in Electrical Installations: Standards and Practices
- **Topic 3:** Verification of Electrical Installations: Methods and Tools
- **Topic 4:** The Holistic Approach to Risk Management in Electrical Systems
- **Topic 5:** Case Studies: Learning from Real-world Compliance Scenarios
- **Topic 6:** Strategic and Operational Management in Electrical Safety
- **Reflection & Review:** Analysing Case Studies and Drawing Conclusions

Day 4: Specialized Electrical Systems and Safety Protocols

- **Topic 1:** Specialized Electrical Systems: Safety and Compliance
- **Topic 2:** Protection Against Voltage Disturbances: Best Practices
- **Topic 3:** Safety Measures for Specific Installations and Locations
- **Topic 4:** Financial Management and Budgeting for Electrical Safety
- **Topic 5:** Strategic Planning for Compliance and Risk Mitigation
- **Topic 6:** Leading and Controlling Safety Activities in Electrical Installations
- **Reflection & Review:** Review of Safety Protocols and Strategic Planning

Day 5: Practical Applications and Course Conclusion

- **Topic 1:** Practical Applications of SBC 401 in Electrical Installations
- **Topic 2:** Integrating SBC 401 into Organizational Compliance Strategies
- **Topic 3:** Advanced Case Studies: Complex Electrical Safety Challenges
- **Topic 4:** Developing a Sustainable Compliance Culture
- **Topic 5:** Future Trends in Electrical Code Standards and Safety
- **Topic 6:** Final Assessment and Certification Process
- **Reflection & Review:** Course Summary and Final Reflections

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How This Course is Different from Other SBC 401 Courses:

This course offers a unique blend of complete theoretical knowledge and practical skills tailored to the specific regulatory environment of Saudi Arabia. Unlike other courses, it provides in-depth coverage of local electrical standards and compliance requirements, with a strong focus on practical application through case studies and interactive sessions. Participants will benefit from expert insights into the latest updates and best practices in electrical safety, ensuring they are well equipped to manage and verify complex electrical systems within their organizations. This course stands out by offering a holistic approach to mastering SBC 401, catering to professionals across various industries and organizational levels.