Mastering The Saudi National Electrical Code (SBC 401)



03 - 07 Nov 2025 Rome



Mastering The Saudi National Electrical Code (SBC 401)

Ref.: 36311_261180 Date: 03 - 07 Nov 2025 Location: Rome Fees: 4800 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

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.

WHO WE ARE

Agile Leaders is a renowned training center with a team of experienced experts in vocational training and development. With 20 years of industry experience, we are committed to helping executives and managers replace traditional practices with more effective and agile approaches.

OUR VISION

We aspire to be the top choice training provider for organizations seeking to embrace agile business practices. As we progress towards our vision, our focus becomes increasingly customer-centric and agile.

OUR MISSION

We are dedicated to developing valueadding, customer-centric agile training courses that deliver a clear return on investment. Guided by our core agile values, we ensure our training is actionable and impactful.

WHAT DO WE OFFER

At Agile Leaders, we offer agile, bite-sized training courses that provide a real-life return on investment. Our courses focus on enhancing knowledge, improving skills, and changing attitudes. We achieve this through engaging and interactive training techniques, including Q&As, live discussions, games, and puzzles.





Gamified and Interactive Training

We understand that training delivery can be challenging, both online and offline. To ensure engagement and achieve learning objectives, we have developed our own activities and collaborated with industry-leading solutions to gamify our training sessions. This approach increases interaction levels and guarantees effective learning outcomes.



Our Training Cate gories

We cover a wide range of training categories to cater to different needs and interests

Branding, Marketing, Customer Relations, & Sales Political & Public Relations Programs Programs

Finance and Accounting Programs Human Resources Management Programs Management & Leadership Programs

Project Management Programs Quality & Process Management Self-Development Programs

Join Agile Leaders today and embark on a transformative journey towards becoming a more agile and effective leader. Experience our customer-centric approach, actionable training, and guaranteed return on investment. Let us help you unleash your full potential in the dynamic business landscape.

