

Mastering The Saudi National Electrical Code (SBC 401)

AGILE LEADERS
Training Center

AGILE LEADERS
Training Center

Mastering The Saudi National Electrical Code (SBC 401)

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: Scope and Fundamental Principles

- **Topic 1:** Overview and Scope of SBC 401
- **Topic 2:** Fundamental Principles of Electrical Safety
- **Topic 3:** Protection Against Electric Shock
- **Topic 4:** Protection Against Thermal Effects and Overcurrent
- **Topic 5:** Managing Fault Currents and Voltage Disturbances
- **Topic 6:** Electrical System Design: Considerations and Best Practices
- **Reflection & Review:** Key Takeaways and Initial Reflections

AGILE LEADERS
Training Center

Day 2: Assessment of General Characteristics

- **Topic 1:** Purposes, Supplies, and Structural Considerations
- **Topic 2:** Types of Distribution Systems and Earthing
- **Topic 3:** Supplies for Safety Services and Standby Systems
- **Topic 4:** Compatibility and Maintainability in Electrical Installations
- **Topic 5:** Ensuring Safety Services and Emergency Preparedness
- **Topic 6:** Division of Installation and Organizational Compliance
- **Reflection & Review:** Day's Learnings and Practical Applications

Day 3: Protection for Safety

- **Topic 1:** Comprehensive Protection Against Electric Shock
- **Topic 2:** Safety Measures Against Thermal and Fire Hazards
- **Topic 3:** Overcurrent Protection: Devices and Strategies
- **Topic 4:** Managing Short-Circuit Currents in Electrical Systems
- **Topic 5:** Protection Against Overvoltages and Electromagnetic Influences
- **Topic 6:** Advanced Techniques in Voltage and Current Management
- **Reflection & Review:** Analysing Safety Measures and Case Studies

Day 4: Selection and Erection of Electrical Equipment

- **Topic 1:** Compliance with Standards and Operational Conditions
- **Topic 2:** Selection and Installation of Wiring Systems
- **Topic 3:** Ensuring Accessibility and Safety of Electrical Equipment
- **Topic 4:** Identification and Prevention of Mutual Detrimental Influences
- **Topic 5:** Isolation, Switching, and Control of Electrical Systems
- **Topic 6:** Earthing Arrangements and Protective Conductors
- **Reflection & Review:** Evaluating Installation Practices and Safety Protocols

Day 5: Verification and Special Systems

- **Topic 1:** Initial and Periodic Verification of Electrical Installations
- **Topic 2:** Special Locations and Installation Considerations
- **Topic 3:** Power Factor Improvement Techniques
- **Topic 4:** Protection Against Lightning: Planning and Implementation
- **Topic 5:** Fire Detection and Alarm Systems in Electrical Safety
- **Topic 6:** Final Assessment and Certification Process
- **Reflection & Review:** Course Summary and Final Reflections

AGILE LEADERS
Training Center

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.

AGILE LEADERS
Training Center

Training Course Categories

- Agile PM and Project Management Training Courses
- Agribusiness & Food Security Training Courses
- Aviation Management and Operations Training Courses
- Certified Courses By International Bodies
- Communication and Public Relations Training Courses
- Crisis Management and Business Continuity Training Courses
- Data Analytics Training and Data Science Courses
- Digital Government & Public Service Training Courses
- Education and Learning Development Training Courses
- Environment & Sustainability Training Courses
- Facilities and Real Estate Training Courses
- Finance and Accounting Training Courses
- Governance, Risk and Compliance Training Courses
- Healthcare Management Training Courses
- Heritage Conservation and Museum Management Training Courses
- Hospitality and Tourism Training Courses
- Human Resources Training and Development Courses
- IT Security Training & IT Training Courses
- Leadership and Management Training Courses
- Legal Training, Procurement and Contracting Courses
- Maintenance Training and Engineering Training Courses
- Marketing, Customer Relations, and Sales Courses
- NGO, Humanitarian and Development Management Training Courses
- Occupational Health, Safety and Security Training Courses
- Oil & Gas Training and Other Technical Courses
- Personal & Self-Development Training Courses

AGILE LEADERS
Training Center

Training Course Categories

- Quality and Operations Management Training Courses
- Secretarial and Administration Training Courses
- Shipping, Maritime and Ports Training Courses

AGILE LEADERS
Training Center

Training Cities

Abu Dhabi UAE	**Accra** Ghana	**Addis Ababa** Ethiopia
Amman Jordan	**Amsterdam** Netherlands	**Athens** Greece
Baku Azerbaijan	**Bali** Indonesia	**Bangkok** Thailand
Barcelona Spain	**Berlin** Germany	**Cairo** Egypt
Cape town South Africa	**Casablanca** Morocco	**Chicago** USA
Doha Qatar	**Dubai** UAE	**Frankfurt** Germany
Geneva Switzerland	**Istanbul** Turkey	**Jakarta** Indonesia
Johannesburg South Africa	**Kuala Lumpur** Malaysia	**Kuwait** Kuwait
Lagos Nigeria	**Langkawi** Malaysia	**Lisbon** Portugal
London UK	**Madrid** Spain	**Manama** Bahrain
Marbella Spain	**Milan** Italy	**Montreux** Switzerland
Munich Germany	**Muscat** Oman	**Nairobi** Kenya

AGILE LEADERS
Training Center

Training Cities

New York USA	**Nice** France	**Paris** France
Phuket Thailand	**Port Louis** Mauritius	**Porto** Portugal
Prague Czech Republic	**Rome** Italy	**San Diego** USA
Seoul South Korea	**Sharm El-Sheikh** Egypt	**Singapore** Singapore
Tashkent Uzbekistan	**Tbilisi** Georgia	**Tokyo** Japan
Toronto Canada	**Trabzon** Turkey	**Vienna** Austria
Zanzibar Tanzania	**Zoom** Online Training	**Zurich** Switzerland