

FAHEEM AHMAD QURESHI

Sr. Electrical Engineer, PMP, CEM, SCE Certified

Riyadh, Saudi Arabia | +966 59 7961195 | faheemaq92@gmail.com

SUMMARY

Sr. Electrical with over 10 years of experience in electrical construction, project engineering, and system automation across metro rail, high rise towers, building automation, and power systems. Skilled in managing projects from design review, quantity take-offs, and technical specifications to installation, testing & commissioning (T&C), and handover. Expertise in earthing, lightning protection, LV/MV switchgear, transformers, power distribution, BMS, CCTV, access control, public address, fire alarm, and parking management systems. Proficient in Electrical work execution and coordinating with civil teams to ensure electrical readiness (Electrical 1st, 2nd, 3rd Fix) and optimizing project schedules. Experienced in project management, site supervision, coordination with consultants and stakeholders to drive timely, efficient project delivery. Proficient in resolving site issues, coordinating with civil and mechanical teams, managing diverse teams, and executing electrical works seamlessly under challenging conditions and tight schedules.

EDUCATION

MASTER OF BUSINESS ADMINISTRATION IN PROJECT MANAGEMENT | University of Studies Guglielmo Marconi, Italy **2024 – 2026**

MASTER OF SCIENCE IN ELECTRICAL ENGINEERING | COMSATS University Islamabad, Pakistan **2016 – 2019**

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING | University of Engineering & Technology, Pakistan **2011 – 2015**

SKILLS

Electrical Construction: Earthing, lightning protection, public address, CCTV, BMS, fire alarm, wiring, circuit installation, AutoCAD, Revit (BIM), equipment installation, electrical calculations, load analysis, quantity take-offs, conduit & cable tray routing, structured cabling, LV/MV switchgear, transformers, power quality analysis, IEC, NEC, IEEE, BS standards.

Project Management: Scope management, cost estimation, procurement, BOQ/BOM preparation, risk mitigation, stakeholder coordination, contract administration, change management, technical submittals, Primavera P6, MS Project.

Quality Management: ISO 9001, QCP, MIR, MAR, WIR, NCR, root cause analysis, site audits, FAT/SAT, ITP, method statements, testing & commissioning reports, safety audits, OSHA compliance, NFPA 70E, ISO 45001.

Documentation & Reporting: As-built drawings, risk assessments, project schedules, progress reports, inspections, compliance documentation, incident investigation, corrective action plans.

PLC / SCADA Systems: Siemens (S7-1200, S7-1500, S7-300, S7-400, S7-200, Logo), Rockwell (CompactLogix, ControlLogix, MicroLogix), Schneider Electric, WinCC, FactoryTalk View, Wonderware InTouch, PCVue, GRS, SM200, KTP400, KTP600, HMI design, DCS integration, communication protocols (Modbus, DNP3, IEC 61850, IEC 60870-5-104).

Systems Integration & Testing: BMS, fire alarm, lighting control, smart parking, access control, power distribution, public address, security systems, LV/MV switchgear commissioning, smart city infrastructure integration, DER integration (solar PV, wind, battery storage), compliance with standards.

Regulatory Compliance: Electrical safety codes, LEED, NFPA 70, IEC 61850, IEC 62443, ISO 50001, OSHA, IEEE, BS, CENELEC, NERC CIP.

Software & Tools: AutoCAD, Revit (BIM), ETAP, Dialux, SKM PowerTools, Linux, Windows, MS Office (Word, PowerPoint, Excel, Outlook, Project, Visio), Primavera P6,

Soft Skills: Communication, Critical thinking, Teamwork, Problem-solving, Time management, Resilience, Creativity, Adaptability, Decision-making, Negotiation, Leadership, Stakeholder engagement.

WORK EXPERIENCE

SENIOR ELECTRICAL ENGINEER | Taj Dhabi | Saudi Arabia

10/2023 – Present

- Led the complete lifecycle of electrical construction projects in Saudi Arabia, covering design review, quantity take-offs, technical specification analysis, vendor prequalification, procurement, installation, testing, commissioning, and project handover.
- Reviewed and approved project documents including Method Statements, ITPs, RFIs, MIRs, WIRs, and MARs, ensuring compliance with SBC, IEC, IEEE, NEC, NFPA, and Saudi Electric Company (SEC) standards.
- Coordinated with structural and civil teams to embed electrical provisions (conduits, sleeves, junction boxes) in slabs, rafts, core walls, and columns before concrete works, ensuring buildability and eliminating rework.
- Supervised first and second fix electrical installations including containment systems (trays, trunking, conduits), cable pulling, termination, MDB/SMDB/DB installation, and lighting/power fit-out in line with approved shop drawings.
- Managed installation, integration, and commissioning of MV/LV panels, RMUs, transformers, ATS, switchgear, and substation

equipment, ensuring performance compliance with Aramco, SEC, and international codes.

- Directed the execution of electrical systems such as lighting, earthing, lightning protection, fire alarm, BMS, HVAC interfaces, ICT, CCTV, access control, public address, structured cabling, smart parking, and SCADA integration.
- Implemented LEED-certified green building automation solutions, enhancing energy efficiency, reducing operational costs, and meeting Saudi sustainability goals.
- Facilitated BIM-based coordination among MEP, HVAC, firefighting, and civil teams to resolve clashes, optimize routing, and ensure seamless service integration.
- Oversaw procurement & logistics for long-lead electrical items, ensuring just-in-time delivery to prevent site delays and align with project milestones.
- Conducted consultant inspections, managed NCRs, and performed quality walkdowns to maintain full compliance with contractual and regulatory requirements.
- Delivered final handover packages including as-built drawings, O&M manuals, test certificates, and maintenance plans, ensuring operational readiness and client satisfaction.
- Acted as the primary liaison for clients, consultants, and authorities, providing updates, addressing technical queries, and facilitating approvals for smooth project progression.

ELECTRICAL PROJECT ENGINEER | Leonardo | Saudi Arabia

09/2021 – 10/2023

- Tested and commissioned 10 elevated, 12 underground stations and the Control Centre in Riyadh Metro Project, Line -3.
- Testing & Commissioning, troubleshooting, fault diagnosis and rectification, I/O mapping verification and I/O loop check on the full range of BMS equipment such as AHUs, FCUs, HRUs, MAUs, VFDs, Fans, PIDs, Dampers, Schedulers, elevators, escalators, Tunnel Ventilation, water drainage, Fire Alarm System (FAS), Public Address System (PAS), Access Control System (ACS) and CCTV.
- Specialized in Siemens SCADA platforms (TIA Portal, WinCC Professional, S7-1200/1500/300/400) and Rockwell Automation (Studio 5000, RSLogix 500/5000, ControlLogix, CompactLogix).
- Executed logic development and system programming using TIA Portal, WinCC, Wonderware, FactoryTalk, RSLogix, and Studio 5000, with configuration of data acquisition, real-time visualization, and alarm/event management in Industrial Control Systems.
- Implemented Cause & Effect matrices, mode tables, operational sequences, and safety interlocks for optimized BMS troubleshooting and response.
- Integrated and tested industrial communication protocols – Modbus TCP/RTU, BACnet, Ethernet TCP/IP, KNX, DALI, and IEC-104 – ensuring interoperability across subsystems.
- Verified & validated control logic, alarms, events, interlocks, and internal wiring for SCADA/PLC panels, complying with IEC, NFPA, and BS standards.
- Directed FAT & SAT for SCADA, BMS, and electrical systems, reviewed redline/as-built documentation, and ensured commissioning deliverables met client and consultant standards.
- Coordinated multi-disciplinary teams (electrical, mechanical, ELV) and vendors for interface testing, SCADA integration, and BMS system handover.
- Supervised electrical installations including LV panels, SMDBs, DBs, grounding systems, containment works, ELV cabling, and lighting fit-out as per SBC, IEC, and BS codes.
- Prepared QA/QC documentation, Method Statements, ITPs, O&M manuals, and commissioning checklists for client handover.
- Led CCC meetings to address project updates, prepare punch lists, resolve integration challenges, and ensure smooth client–contractor coordination.

ELECTRICAL PROJECT ENGINEER | Munster Technological University | Ireland

10/2019 – 09/2021

- Worked on Horizon Europe Irish State in CPS & IoT for Sustainable Smart Cities, Industry 4.0, and smart grid automation over SDN.
- Investigated cascading failures in smart grid and critical Cyber-Physical Systems (CPS) to protect national energy infrastructure.
- Engineered IEC 61850-based smart grid architecture using Software Defined Networking (SDN) to enable real-time GOOSE, SV, and MMS communication, supporting dynamic traffic control, fault tolerance, and scalable operations for the Irish energy network.
- Integrated Intelligent Electronic Devices (IEDs), Remote Terminal Units (RTUs), PLCs, and HMIs with validated time synchronization, event reporting, and seamless IEC 61850 protocol interoperability, ensuring compliance with Irish grid standards.
- Deployed SDN controllers for adaptive load management and efficient coordination of DERs across transmission and distribution networks, enhancing grid flexibility and resilience.
- Developed and optimized SCADA control logic for automated protection, load balancing, interlocking, breaker sequencing, and auto-reclose automation, improving operational safety and reliability.
- Configured multi-protocol SCADA communication (Modbus, DNP3, IEC 60870-5-104, IEC 61850) to automate multi-vendor assets, enabling integrated control of energy, water, and transport systems within smart city infrastructure.
- Conducted IEC 62443-based cybersecurity assessments and implemented role-based access controls, encrypted communication protocols, machine learning-driven intrusion detection, and incident response procedures to protect SCADA/EMS infrastructure.
- Utilized real-time SCADA dashboards and analytics for proactive anomaly detection, predictive maintenance, AI-driven fault diagnostics, and automated grid stabilization to ensure reliable smart grid performance.

- Reviewed project scope, drawings, and technical specifications, ensuring full compliance with client requirements, local regulations, and Saudi standards (IEEE, IEC, SBC, SASO) prior to execution.
- Coordinated with consultants, contractors, and suppliers to finalize material submittals, work schedules, and procurement plans ensuring uninterrupted site progress.
- Planned and scheduled electrical installations with detailed work breakdown structures, resource allocation, and sequencing for systems including lighting, power distribution, ELV, BMS, public address, fire alarm, UPS, ATS, generators, and photovoltaic (PV).
- Supervised installation of cable management systems—cable trays, trunking, conduits, and support structures—ensuring alignment with approved site layouts and compliance with IEC and NFPA codes.
- Oversaw cable pulling, glanding, and termination for LV power, control, and ELV networks, ensuring correct wiring, labeling, and documentation for efficient maintenance.
- Managed installation of LV/MV equipment including transformers, switchgear, MDBs, SMDBs, DBs, busbars, isolators, and panel boards, verifying correct placement, mounting, and commissioning readiness.
- Directed grounding and lightning protection systems installation: executed earthing mesh work, electrode installation, and grounding of panels, transformers, and generators per site conditions and consultant approvals.
- Led termination and functional testing of motors, UPS, battery banks, diesel generators, ATS panels, and electrical outlets to confirm operational reliability before commissioning.
- Coordinated closely with civil and mechanical teams to ensure proper routing and seamless integration of electrical services with structural and MEP elements.
- Conducted 1st, 2nd, and 3rd fix inspections jointly with consultants and clients; prepared Work Inspection Reports (WIRs) and enforced corrective actions to meet quality standards.
- Supervised and supported functional testing and commissioning of LV power distribution, ELV systems, fire alarm, BMS, elevators, and escalators, confirming compliance with operational and safety standards.
- Resolved punch lists, Non-Conformance Reports (NCRs), and additional works, ensuring smooth and timely project handovers.
- Prepared detailed as-built drawings, testing reports, invoices, and comprehensive final project documentation for client submission and approval.

CERTIFICATIONS

PROJECT / QUALITY MANAGEMENT CERTIFICATIONS

- Certified Energy Manager (CEM) from Association of Energy Engineers | AEE® USA.
- Project Management Professional (PMP) from Project Management Institute (PMI).
- Primavera P6 – Project Planning and Project Scheduling from Udemy, California, USA.
- Diploma in Quality Management and Six Sigma from Alison, Ireland.
- Quality Engineering & Management from Munich University, Germany.

AUTOMATION CERTIFICATIONS

- Building Management Systems (BMS) from Udemy, California, USA.
- PLC/SCADA Professional from SINA Institute of Networks and Aesthetics.
- Cisco Certified Network Associate (CCNA) from CICSO Academy UET, Taxila.
- Programmable Logic Control (PLC/HMI/SCADA) from Electrical Engineering Solutions.

TECHNICAL CERTIFICATIONS:

- Cisco Certified Network Associate (CCNA) from CICSO Academy UET, Taxila.
- Solar Energy from Delft University of Technology, Netherlands.
- Renewable Energy from the University of Texas System, Texas State, USA.

PROFESSIONAL LICENSES

- Saudi Council of Engineers – SCE (2024 – Present)
- Pakistan Engineering Council - PEC (2015 – Present).
- Institute of Electrical and Electronics Engineers - IEEE (2012 – Present).

CONTACT DETAILS

- Address: Riyadh, Saudi Arabia, 12211.
- Mobile number/WhatsApp: +966 59 7961195
- Email: faheemaq92@gmail.com
- Nationality: Pakistani