



**BLACK &
VEATCH**

Certificate of Completion

This certifies that

Suhail Abugdera

*has successfully completed 1.00 hours of training in
Advanced Schematic Drawing Comprehension Part 2*

on this date 8/12/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 0.75 hours of training in

Advanced Schematic Drawing Comprehension

on this date 8/12/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Basic Engineering Drawing

on this date 6/29/2023



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VEATCH**

Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.50 hours of training in
Basics of Grounding Design for Engineers & Designers

on this date 8/10/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

BV Smart Utility Lab Features and Capabilities

on this date 8/20/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.50 hours of training in

Cable Sizing

on this date 5/13/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 2.00 hours of training in

CASES Wiring Module Learning Demo

on this date 8/11/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in
Circuit Routing and Above Grade Raceway Design - Overview

on this date 8/13/2025



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VEATCH**

Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in
Complex RTU and Data Concentrator Programming Techniques

on this date 8/21/2025



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VEATCH**

Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Control System Networking and Remote Dispatching Centers for Power Utilities

on this date 7/24/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Current Transformers (CT's) and Saturation: Learning Objectives

on this date 8/20/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Data Centers 101

on this date 8/24/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Data Centers - Electrical Engineering 101

on this date 8/24/2025



Training Certificate of Achievement

Hereby Acknowledges that

Suhaib F Abugdera

has completed the in-service training on **August 24, 2025** for

DC Power in the Data Center

Congratulations on your completion of this **1.00** hour online course.

A handwritten signature in black ink that reads "mogj".

Michael Ojdana, Chief Learning Officer, Content

As an IACET Accredited Provider,
Vector Solutions offers CEUs for its
programs that qualify under
the ANSI/IACET Standard.





Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Design-Build Projects: Project Delivery Types (Relationships)

on this date 7/9/2025



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VEATCH**

Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Distribution Automation

on this date 8/4/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Electrical Engineering for Data Center Projects

on this date 10/30/2023



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in
Electrical Engineering for Electrical Vehicle (EV) Charging Projects

on this date 9/26/2023



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Electrical Engineering for Hydrogen Projects

on this date 8/16/2025



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Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Electrical Engineering for Water Projects

on this date 8/20/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in
Electrical Equipment Physical Arrangements - Overview

on this date 8/15/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 0.25 hours of training in
Electrical Inspection (for Water and Wastewater Facilities)

on this date 8/21/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in
Electrical Safety: General Hazards and Mitigation (IEC)

on this date 8/15/2025



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Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Electrical Safety: General Hazards and Mitigation (NFPA 70E)

on this date 8/15/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.50 hours of training in

Elementary Schematic Design

on this date 7/1/2023



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Engineering Principles for Sustainability

on this date 7/16/2023



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in
Forbes AC Station Service Retrofit: Learning Objectives

on this date 8/15/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.50 hours of training in

Green H2 and Green NH3 Concept Development and Feasibility Study

on this date 8/28/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 0.50 hours of training in

Grounding Analysis - CDEGS Application and Implementation

on this date 8/10/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 0.75 hours of training in

Grounding Systems

on this date 8/10/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

IMI Critical Engineering - Flow Control Products and Services

on this date 6/12/2024



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Impedance Measured by Distance Relays ? Effect of Fault Type and CT and VT Connections:
Learning Objectives

on this date 8/16/2025



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Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.50 hours of training in

Insulated Cables Basics

on this date 7/24/2023



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Introduction to Finite Element Analysis (FEA)

on this date 8/23/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Introduction to Geothermal Power Part 1

on this date 3/25/2024



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Introduction to Geothermal Power Part 2

on this date 3/25/2024



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 0.75 hours of training in

Introduction to Grounding Theory and Application for Grounding Analysts

on this date 8/10/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Introduction to Power Grid Components

on this date 6/17/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Introduction to Synchronous Condensers

on this date 11/28/2023



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.50 hours of training in

M9 - Grounding Layout

on this date 8/29/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 0.50 hours of training in

Main Ground Grid Design

on this date 8/10/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 0.75 hours of training in

Major Electrical Power Equipment Sizing

on this date 8/15/2025



Certificate of Completion

This certifies that

Suhail Abugdera

*has successfully completed 1.00 hours of training in
MCE Brownbag - Introduction to Cathodic Protection*

on this date 8/15/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Microgrid Training Session No. 1 ? Stakeholders, Prescreening, and Terminology

on this date 8/14/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 0.75 hours of training in

Microgrid Training Session No. 2 ? ArcGIS, Transmission And Distribution Equipment, Meter
Data

on this date 8/4/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

NERC - PRC & MOD Studies for Inverter Based Resource Projects

on this date 8/13/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Purpose(s) of Capacitor Banks in Power System: Learning Objectives

on this date 8/16/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in
Radio Frequency Network Design and Testing Overview

on this date 8/26/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Rotating Electrical Machines

on this date 7/23/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

RTU Programming and IED Configuration

on this date 8/21/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

SCADA System Commissioning

on this date 8/23/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 0.50 hours of training in

Schematic and Wiring Process for Power Gen - Updated Division of Responsibility

on this date 8/13/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 0.50 hours of training in

Schematic Shop Drawing Review Part 2: Enclosures and Power Sources

on this date 8/11/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 0.50 hours of training in

Sustainability Smarts

on this date 5/6/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Vendor Shop Drawing Review: Overview - Part 1

on this date 8/11/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

VFP Control Buildings

on this date 9/24/2024



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Voltage Energy

on this date 2/6/2025



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Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Water Solution Electrical Training - Data Center Project Resident Electrical Engineer Experience

on this date 7/2/2025



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Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in

Water Solution Electrical Training Session - Design-Build: Designing in a Design-Build Project

on this date 7/16/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 0.75 hours of training in

Wiring Diagram Design

on this date 8/11/2025



Certificate of Completion

This certifies that

Suhail Abugdera

has successfully completed 1.00 hours of training in
Yates Cathodic Protection Training and Lessons Learned

on this date 8/15/2025