

Our IEEE 1547.1 training workshop provides attendees with a deeper understanding of the standard, especially the new Interoperability requirements. Students will learn the technical skills needed to conduct both interoperability and type testing as defined in UL 1741 SB. And students will learn how to automate UL 1741 SB testing with QualityLogic's IEEE 1547.1 Test Tools.

### TRAINING WORKSHOP AT A GLANCE

IEEE 1547-2018 and 1547.1-2020 introduce significant new testing and certification challenges for the inverter industry. These include enhanced Type testing and Interoperability testing. The testing procedures are further elaborated in UL 1741 Edition 3 (*September 2021*).

One of the most significant new testing challenges is the requirement to use one of the standard protocols specified in IEEE 1547-2018 to conduct Interoperability testing. For many UL 1741 testers, these protocols are new and will require a combination of knowledge and tools to conduct the required UL 1741 SB testing.

To help meet these challenges, QualityLogic offers a IEEE 1547.1 Testing Workshop ideal for those who need to learn enough about IEEE 1547.1 / UL 1741 SB to conduct the certification testing. The class covers the three standards (IEEE 2030.5, SunSpec Modbus, and DNP3), the Interop and Type tests defined in IEEE 1547.1 and UL 1741 SB, and training on automating the development and certification testing to achieve UL 1741 SB certification.

The workshop includes demonstrations of the QualityLogic Test Tools to train participants on how to use the tools to conduct 1547.1/UL 1741SB testing for Type and Interop tests, manage the test equipment (grid/DC simulators, data collection system), and capture the test logs to support pass/fail analysis. Participants can use the knowledge from this training to use QualityLogic's 1547.1 test tool to perform automated or manual testing on their target smart inverter device.



## **FLEXIBLE TRAINING SCHEDULES**

- Private workshops dedicated to a single company's staff
- Public workshops open to teams from multiple companies
- Virtual workshops are offered live via Microsoft Teams or Zoom and is spread over 3 days to fit your schedule
- On-site training may be available on a case-by-case basis
- Other protocol training is also available from QualityLogic. Ask us for details.

### **WORKSHOP DETAILS**

### DAY 1

- **Session 1:** Introduction to IEEE 1547-2018
- **Session 2:** Introduction to IEEE 1547.1-2020
- **Session 3:** Introduction to UL 1741 SB

## DAY 2

- Session 4: IEEE 2030.5 Protocol
- Session 5: SunSpec Modbus 700 Protocol
- Session 6: IEEE 1815 (DNP3) Protocol)

# DAY 3

- **Session 7:** QualityLogic IEEE 1547.1 Test Tools
- Session 8: Conducting Tests using QualityLogic Test Tools
- Session 9: Reviewing Test Results from QualityLogic Test Tools

Discover why so many inverter manufacturers, companies, and labs rely on QualityLogic's DER protocol expertise. Contact us today.

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