



Advanced Solar PV Project Experience: 5-Day Workshop in Our Hands-On Solar Lab in Austin, Texas; \$1295

Next Dates: January 25th – January 29th, 2019

40 Advanced Training Hours Towards NABCEP PV Certification Exam Requirements

Complete several hands-on solar labs during our workshop including:

Rail-Less Installation Lab (Ecolibrium Solar EcoX , Canadian Solar, UL2703 Compliant)

Grid-Tied PV Installation & Commissioning Lab with DC Optimizers (Mission Solar, SolarEdge, Ecolibrium Solar)

Rail-Based Shingle Roof Flashing and Mounting Lab & Metal Roof Mounting Lab (SnapRack, Canadian Solar)

Site Assessment Lab (Solar Pathfinder, Solmetric SunEye)

Microinverter System with IQ Battery (Enphase Energy IQ)

Ecolibrium Solar EcoFoot5D Ballasted Mounting System Lab

Friday

- Update on PV Industry Growth and Dynamics
- Project Experience Roadmap & Design Verification
- PV System Technologies, Components & Configurations
- The Solar Resource
- Site Assessment Tools: Pathfinder, SunEye
- IBC and IFC Code Requirements
- **HANDS-ON LAB: Site Assessment**
- DEMO: Performance Estimation

Saturday

- **HANDS-ON LAB: Rail-Based Flashing & Mounting Labs**
- Tools: Multi-Meters, Irradiance Meters, etc.
- **HANDS-ON LAB: Grid-Tied PV Installation & Commissioning Lab with DC Optimizers**
- **HANDS-ON LAB: Ecolibrium Solar EcoFoot Ballasted Mounting System Lab**
- DEMO: SolarEdge Monitoring Portal
- DEMO: SolarEdge Designer

Sunday

- PV System Three Line Wiring Diagrams
- The 2017 National Electrical Code (NEC)
- EXERCISE: PV System Design
- Managing PV Projects
- The Qualified Solar Pro: NABCEP Certification

Monday

- Inverters & Inverter Sizing Calculations
- Conduit & Raceway Calculations
- Electrical Integration & the NEC
 - PV System Grid Interconnection
 - Conductor Sizing Calculations
 - EXERCISE: Ampacity
 - Important Changes in the NEC
 - Overcurrent Protection & NEC Article 240
- New PV Power Electronics Technologies:
Microinverters, DC Optimizers, AC Modules
- Ungrounded PV and Non-Isolated Inverters: Code & Installation Considerations
- Field Inspection Guidelines for PV Systems
- Inspections of PV Systems: Best and Worst Practices
- PV System Equipment Labeling Requirements

Tuesday

- Enphase Energy Microinverters & IQ Batteries
- **LAB DEMO: Microinverters & IQ Batteries**
- Rail-Based versus Rail-Less Mounting Systems
- **HANDS-ON LAB: Rail-Less Mounting Installation Lab**
- DEMO: Ecolibrium Solar EcoX Estimator
- TOUR: Local Solar Equipment Distributor

Location and Parking

The ImagineSolar training center, office, and solar lab are located at 4000 Caven Rd. Austin, TX 78744. It is a stand-alone building with the words Electrical Training Center above the 2-door main entrance. Our building has a large parking lot with trees. The parking is free and does not require a permit.