

**Oregon Renewable Energy
Joint Apprenticeship & Training Committee**

To qualify for the Oregon Limited Renewable Energy Technician's (LRT) licensing exam, apprentices must complete 4000 hrs. of on-the-job training (OJT) with a registered training agent, along with 288 hrs. of related training (RT) with a registered related training provider. Please plan when and where you will take these classes. Classes at Clackamas Community College are given irregularly.

1st Year Related Instruction

APR153A, CCC RET200 or SEI RE100/SEI PVOL101, CCC RET211 or SEI PV202, SEI CE523, SEI CE525.

2nd Year Related Instruction:

CCC RE213 or SEI PV203 or SEI PV350, SEI CE 526 or OSSIA Conference NEC update, SEI CE529, NABCEP PV Installation Professional Board Certification.

1st Year Related Instruction Review

APR153A: Electrician Apprentice Fundamentals: 60 hours

- Online through Independent Electrical Contractors (IEC) which is on Chemeketa Community College campus. Course costs \$510
- <https://www.chemeketa.edu/programs-classes/program-finder/apprenticeship/course-descriptions/>
- To register, please contact Jeff Hooper at jeff@iecoregon.org or 541-301-0358. New sessions begin every September and January; courses take place on weekday evenings.

RET200: Renewable Energy Systems: 40 hours

- Hybrid instruction through Clackamas Community College.
- Counts for SEI PVOL101 and RE100. \$234 + fees
- Check with the Renewable Energy Program about when the CCC courses are taught.
- Must [Apply to CCC](#).

RE100: Introduction to Renewable Energy Systems: 6 hours

- Online through Solar Energy International; FREE
- <https://www.solarenergy.org/courses/introduction-to-renewable-energy/>

PVOL101: Fundamentals of Grid-Direct Solar Design and Installation: 60 hours

- Online through Solar Energy International; \$895 (use discount code "OSEIAMEM100" for \$100 off) or apply for a scholarship (see information below)
 - <https://www.solarenergy.org/courses/solar-training-solar-electric-design-and-installation-grid-direct-online/>

CE523: Residential and Commercial Roof-Mounted PV Installation Safety &

CE525: Large-Scale Ground-Mounted PV Installation Safety: 20 hours

- Online through Solar Energy International; \$149 (use discount code "OSEIAMEM100" when registering online to get \$100 off)
 - <https://www.solarenergy.org/shop/package-deals/solar-safety-training-package/>

CE529: Hazards of Electrochemical Storage Systems in Solar + Storage Applications: 4 hours

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- Online through Solar Energy International; \$199 (register via phone at 970-527-7657 with discount code "OSEIAMEM100" to get \$100 off)
- <https://www.solarenergy.org/hazards-of-electrochemical-energy-storage-in-solar-and-storage-applications/>

2nd Year Related Instruction Review:

RE211: Renewable Energy Technology II: 66 hours

- Hybrid instruction through Clackamas Community College.
- Counts for SEI PV202. \$351 + fees
- Must [Apply to CCC](#).

PVOL202: Advanced PV Design and the 2017 National Electrical Code: 60 hours ○ Online through Solar Energy International \$895 (use discount code "OSEIAMEM100" to get \$100 off) or apply for a scholarship (see information below)

- <https://www.solarenergy.org/courses/solar-training-advanced-pv-system-design-and-the-nec-grid-direct-online/>

RE213: PV Installation and Maintenance: 66 hours

- Hybrid instruction through Clackamas Community College.
- Counts for SEI PV203 or SEI PV350. \$351 + fees
- Must [Apply to CCC](#).

PVOL203: Fundamentals of Battery-Based PV Systems OR PVOL350: Tools and Techniques for PV Operations and Maintenance (select one): 40 hours

- Online through Solar Energy International \$695 (use discount code "OSEIAMEM100" to get \$100 off) or apply for a scholarship (see information below)
- <https://www.solarenergy.org/courses/solar-training-pv-system-fundamentals-battery-based-online/>
- <https://www.solarenergy.org/courses/solar-training-tools-techniques-operation-maintenance-online/>

CE526: PV & Energy Storage and the 2020 National Electrical Code: 8 hours

- Online through Solar Energy International, \$149 (use discount code "OSEIAMEM100" for \$100 off) or apply for a scholarship (see information below)
- <https://www.solarenergy.org/courses/the-2020-nec-pv-and-energy-storage-systems/>

NABCEP PV Installation Professional Board Certification: 55 hours

- Passing score provides 55 hrs. of related instruction, offered through the North American Board of Certified Energy Practitioners (NABCEP)
- Application \$125, Exam \$375
- Free [Heatspring NABCEP PVIP Practice Test](#)
- <https://www.nabcep.org/certifications/nabcep-board-certifications/>

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LRT Licensing Exam is given by the Oregon Building Codes Division. The LRT Apprenticeship Program Administrator will refer you to this exam when you complete your on-the-job training and related training. For LRT licensing exam tutoring & practice tests (optional), go to <https://oregonelectrictestprep.com/>

As an LRT apprentice, you are responsible for registering for these classes on your own. While there is flexibility regarding when you complete these classes, please note that you cannot advance to the next term of apprenticeship until meeting both the minimum on-the-job training (OJT) and related training (RT) hours, as shown below:

Term of Apprenticeship	OJT Hours	RT Hours	Min % of Average Journey Worker Wage
1 st	0 - 1000	0 - 72	50%
2 nd	1000 - 2000	72 - 144	60%
3 rd	2000 - 3000	144 - 216	70%
4 th	3000 - 4000	216 - 288	80%

To learn about tuition payment assistance options with Solar Energy International, including scholarship information, go to: <https://www.solarenergy.org/tuition-payment-options/>

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