

SOLR1102 - Photovoltaics Site Assessment

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| Credits: | 2 (2/0/0) |
| Description: | This course uses presentations, exercises, activities and classroom discussion to demonstrate how to perform a residential photovoltaics (PV) site assessment, using a template created by the MREA (Midwest Renewable Energy Association). Topics covered include load analysis and consumption history, energy efficiency recommendations, mounting options, balance of system location requirements, shade analysis, system sizing, financial analysis and options, and non-financial benefits of PV. Participants learn how to access and use online tools for assessing the solar resource, perform site-specific shade analysis, recommend system size and location, calculate energy production, estimate system costs, and identify available PV rebates and incentives. |
| Prerequisites: | <ul style="list-style-type: none"> • SOLR1101 |
| Corequisites: | |
| Pre/Corequisites*: | |
| Competencies: | <ol style="list-style-type: none"> 1. Perform a load analysis and recommend steps for energy efficiency. 2. Identify and analyze components of a standard electrical bill. 3. Correctly perform a shade analysis using the appropriate tools, i.e. Solar Pathfinder or other programs or instruments. 4. Estimate energy production with online tools (PVWatts). 5. Quantify a site's solar resource using the Solar Pathfinder and PVWatts Calculator. 6. Identify and recommend PV array location. 7. Identify and recommend balance of system (BOS) location. 8. Recommend a PV system type and size to meet the goals of potential owners. 9. Estimate system costs and basic cash flow analysis. 10. Identify applicable rebates, incentives, and taxes and address non-financial benefits of PV systems. 11. Write a professional PV Site Assessment Report. |
| MnTC goal areas: | None |

*Can be taking as a Prerequisite or Corequisite.