



INTRO TO SOLAR ELECTRICITY

Course Number Course Name	ELEC 110 INTRO TO SOLAR ELECTRICITY
Credit Value (Breakdown of theory and lab credits)	1,1T+0S
Catalog Course Description	You will study the basics of electrical wiring technology found in photovoltaic systems, including direct current (DC) and alternating current (AC) circuits. You will review basic electrical theory and the current National Electrical Code (NEC) requirements. You will be introduced to the components found in grid-tied systems and stand-alone systems and given the opportunity to compare these systems. (1, 1T+0S)
Student Learning Outcomes/Objectives /Competencies of the Course	<ul style="list-style-type: none"> • Overview of PV systems and basic electricity • Sunshine basics • How P.V. works • Components of PV systems, setup, configuration, • Sizing, wiring and controls, relevant sections of NEC • Zoning laws and building codes pertaining to PV systems, • Specific parameters of concern to utilities in grid connected systems, practical experiments and demonstrations of different aspects of PV • Site visit with detailed explanation of maintenance and trouble shooting • Actual hands on set up of a small grid connected system • In addition, basic electrical concepts and safety issues related to PV installation and maintenance work will be covered
College-Wide Student Learning Outcomes	Critical Thought