



**EDISON STATE  
COLLEGE**

LEE CAMPUS

*Center for Professional Development*

## **FUNDAMENTALS OF SOLAR ENERGY APPLICATION**

**During The 5 week class the following topics will be presented:**

1. Terminology and technologies associated with solar electrical and solar hot water systems.

D/C to A/C Inverter...Combiner.....Crystalline Panels...laminates....wire bridge.....DC Disconnect.....Solar Meter & generators....Grid Tie In vs. Stand alone...Solar Array.....Trackers.....Advanced Green Technology... G.E. Brilliance

2. How to properly size and install a residential or commercial photovoltaic and hot water system

Converting kilowatts to amperage- volt. Peak performance vs. Ambient Charging. Tie in to the electrical grid, permitting requirements and contractor information. Roof top installation. Ground Installation. System Life Expectancy. Angle of incidence. Impact of Hurricanes.

3. The economics of solar power

Federal, State and local incentives. Form protocols. Utility company incentives. FSEC, The Florida Solar Electrical Council. Renewable energy credits. Database of State Incentives for renewable energy.

4. Impact of renewable energy sources. pit falls and concerns

Impact on utility companies, residential and commercial customers. System cost vs. payback. Environmental and community concerns. Job projections and growth. Market speculations. Experimental solar projects. References.

5. Guest Speakers, Q & A, The FP&L Solar Array in Arcadia, Florida

The largest solar array to date in the United States. Q & A, Guest speakers from Advanced Green Technologies and All Phase Electric of Ft Myers.

**Dates:** Tuesday evenings,  
○ May 11<sup>th</sup> – June 8<sup>th</sup> (5 weeks)  
○ July 13<sup>th</sup> – August 10<sup>th</sup>  
○ August 24<sup>th</sup> September 21<sup>st</sup>

**Time:** 6:00pm to 9:00 p.m.

**Cost:** The cost of this 15 hour course is \$260

**Location:** Edison State College, Fort Myers Campus, room to be announced

**Instructors:** Mike DeGregorio

**Seats are limited, so register today!**  
**Advance registration and payment is required**  
**For registration form and information, email [celee@edison.edu](mailto:celee@edison.edu)**  
**OR download from [edison.edu/lee/ce](http://edison.edu/lee/ce)**