



## 2011-2012 Career Planning Guide

### Solar/Photovoltaic (PV) Design and Marketing

**Shoreline Community College**  
**16101 Greenwood Avenue North**  
**Shoreline, Washington 98133**

Length of Program: 5 credits  
Completion Award: Notice of Completion  
Program Advisors: Mike Nelson

#### **Approximate Quarterly Costs:**

Check quarterly class schedule for Tuition Table

Parking Fee per Quarter: \$15

Books, supplies, etc: Varies per quarter, approximately \$200

Enrollment: FWSp

#### **PROGRAM DESCRIPTION**

The Solar PV Designer Program will train students to specify and/or recommend solar panel systems for residences and buildings. Participants will be able to assist and inform the electricians who install solar panels. The program will have a strong hands-on component.

#### **PROGRAM OUTCOMES**

- Understand the basics of design for residential and commercial photovoltaic systems.
- Perform site analysis, including sun path assessment, roofing assessment, and alternative mounting options, including building integrated technologies.
- Demonstrate understanding of installation and troubleshooting skills, maintenance issues and design criteria for photovoltaic energy systems.
- Understand types of renewable energy systems and appropriately size and make recommendations for particular situations.
- Evaluate residential and commercial building energy use patterns.
- Obtain preparation for NABCEP Entry Level Test.

**Career Ladder Short Term Programs:  
Solar/Photovoltaic (PV) Design and Marketing**

**CAREER OPPORTUNITIES**

Program completers could work with customers, electricians, builders, architects, equipment manufacturers and distributors, engineers, consultants; utility companies and governmental officials.

Students may find employment in a variety of regional and national solar installation companies, solar manufacturing industries, electric utilities, architectural firms, and Design build firms. Solar electric system specification and evaluation is practiced in places such as Puget Sound Solar, Outback Power Systems, Silicon Energy, Puget Sound Energy, Sparling Electric, Mithun Architects, Burke Electric, Northwest Mechanical and Solar Washington and others.

**POTENTIAL POSITIONS INCLUDE**

Utility Conservationist; Solar Design and Sales; Solar Customer Service Professional; Entry Level Energy Consultant; Green Building Project Specialist; Inventory Control Specialist-Solar; Solar-Process Data Miner; Renewable Energy Educational Liaison; Solar Sales Consultant; Solar Technical Support; Construction Trainee; Energy Auditor; LEED Documenters. Entry level wages range from \$14 to \$25 per hour.

**PROGRAM PREREQUISITES**

College English or COMPASS Test Score at the ENGL& 101 level.  
Completion of MATH 099 Intermediate Algebra or placement into MATH& 146 (College Level Math with COMPASS Test). People with a four-year degree will not have to meet these prerequisites

Students should have current background in Environmental Sciences, Engineering, Physics and Business. Field experience in electrical work and/or the design, building and construction trade is recommended. A bachelor's degree is helpful. Students should see an advisor before registration.

**PROGRAM REQUIREMENTS**

NRG 120 Solar Elec Design & Apps 5 credits