



## 2011-2012 Career Planning Guide

### Solid Works

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

Length of Program: 16 credits, part-time, three quarters  
Completion Award: Certificate of Completion  
Program Advisors: Faculty – Karen Kreutzer  
Room 2817 206-546 4576  
[kkreutzer@shoreline.edu](mailto:kkreutzer@shoreline.edu)

#### **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**

Designers and drafters work with engineers and other professionals to translate their ideas into technical drawings, which will guide the fabrication of products, the assembly of industrial equipment and the construction of large projects such as buildings, dams and pipelines. Technical drawings prepared by drafters typically show what the finished product or structure will look like from every angle along with detailed specifications on the dimensions, materials and assembly procedures. These drawings are then used to convey the engineer's concepts to the people who will do the actual construction. Solid Works allows designers to create and revise products in the office or through the Internet. The certificate is an introduction to designing, drafting, or illustrating construction, engineering, manufacturing or architecture.

#### **PROGRAM OUTCOMES**

1. Utilize Solid Works skills to prepare drawings that detail specifications and procedures to be used in the construction and manufacturing process.
2. Apply appropriate techniques and procedures for solving basic engineering problems.
3. Use illustration skills to create pictorial drawings for use in manuals, parts books and advertisements.
4. Use calculation skills to determine the precise size of features shown on technical drawings.

#### **CAREER OPPORTUNITIES**

Completers may be employed an entry-level drafters by architectural and construction firms, engineering consulting and manufacturing companies and state and local government. Employment prospects tend to be cyclic.

#### **POTENTIAL POSITIONS INCLUDE**

Mechanical Designer, Architectural Drafter, Civil Drafter, Detailer, Technical Illustrator. For employment outlook, see the U.S. Dept. of Labor Occupational Outlook Handbook at <http://www.bls.gov/OCO>.

**Career Ladder Short Term Programs:  
Solid Works**

**Program Requirements**

MATH 095 Intermediate Algebra, Individualized

**or**

MATH 099 Intensive Intermediate Algebra 5 \_

ENGR& 114 Engineering Graphics 5 \_

ENGR 205 Solid Works & Parameters Modeling 3 \_

ENGR 206 Advanced Solid Works 3 \_

**Total 16 credits**

**EPC 602A**

**9-12.11**