Introduction to Solid Modeling - SolidWorks
Course Outcome Summary

Course Information
Organization: Monroe County Community College, Applied Science and Engineering Technology
Developers: Dean R. Kerste
Development Date: 12/1/2008
Revised Date: 8/30/2009
Course Number: MDTC 228
Instructional Level: Associate Degree
Potential Hours of Instruction: 45
Total Credits: 3

Description
The Solid Modeling - SolidWorks course is designed for SolidWorks students, designers, and engineers. This course is the first step toward becoming a proficient SolidWorks user. It covers the core concepts of 3D parametric modeling, common part design, assembly creation, and drawing generation. Additionally, the course is designed to help users prepare and successfully pass the Certified SolidWorks Associate (CSWA) exam.

Major Units
1. SolidWorks Basics and User Interface
2. Sketching
3. Basic Part Modeling
4. Advance Part Modeling
5. Assembly Modeling
6. Engineering Drawings
7. SolidWorks Simulation
8. CSWA Preparation

Types of Instruction
<table>
<thead>
<tr>
<th>Instruction Type</th>
<th>Contact Hours</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Classroom Presentation</td>
<td>45</td>
<td>3</td>
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Textbooks

Learner Supplies
USB Flash Drive.

Prerequisites
none
Exit Learning Outcomes

General Education Outcomes
A. Demonstrate an understanding of the process of scientific inquiry
B. Apply mathematical approaches to the interpretation of numerical information
C. Apply mathematical approaches to the analysis of numerical information
D. Use computer technology to communicate information

Competencies
1. Recognize the SolidWorks user interface.
2. Demonstrate the process of creating part models.
3. Demonstrate the process of creating assembly models from part models.
4. Prepare engineering drawings from part and assembly models.
5. Describe the purpose and function of SolidWorks Simulation.
6. Perform an FEA analysis utilizing SolidWorks Simulation.
7. Articulate the key topics covered in the CSWA exam.
8. Pass the CSWA exam.