Advanced SolidWorks - CSWP
Course Outcome Summary

Course Information
Organization: Monroe County Community College, Applied Science and Engineering Technology
Developers: Dean R. Kerste
Development Date: 11/8/2011
Revised Date: 11/8/2011
Course Number: MDTC 232
Instructional Level: Associate Degree
Potential Hours of Instruction: 45
Total Credits: 3

Description
The Advanced SolidWorks - CSWP course teaches students how to design and analyze parametric parts and moveable assemblies using a variety of complex features in SolidWorks. Advanced part modeling, advanced assembly modeling, sheet metal, and weldments are covered. Additionally, the course is designed to help students prepare and successfully pass the Certified SolidWorks Professional (CSWP) exam.

Major Units
1. Advanced Part Modeling
2. Advanced Assembly Modeling
3. Sheet Metal
4. Weldments
5. CSWP 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
MDTC 228

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. Demonstrate how to create multibody solids.
2. Demonstrate how to create sweeping and lofting features.
3. Demonstrate how to use the more advanced shaping capabilities of SolidWorks.
4. Recognize how to maximize use of the assembly modeling capabilities of SolidWorks.
5. Demonstrate how to build sheet metal parts using SolidWorks.
6. Demonstrate how to build standalone sheet metal parts.
7. Demonstrate how to convert conventional parts to sheet metal, including in assembly context.
8. Demonstrate how to convert conventional parts to sheet metal, including in assembly context.
9. Understand and identify weld beads.
10. Prepare for the CSWP Exam.