

**Board Approval Date:** June 2012

**Course Title: Engineering, Drafting and Design: CADD II**

**Credit / Hours: Semester Course (.5 Credit)**

**Course Description:**

This semester course is aligned to technology standards and advances student understanding of engineering and design work. The versatility and power of AutoCAD is explored in greater detail in this course that follows the initial introduction to Engineering, Drafting and Design 1. Projects extend the student's knowledge of design applications, 3-D, and advanced architectural and engineering problems. The importance of STEM (Science, Technology, Engineering, Math) is examined and used as a focus as it pertains to the designed world we live in.

**Learning Activities / Modes of Assessment:**

Create 3-D engineered parts  
Design and create 3-D assemblies consisting of multiple parts  
Design energy efficient buildings  
Specific Project Assessments with Rubrics

**Instructional Resources:**

*Autodesk Design Academy Software*  
Appropriate Internet sites  
*Technical Drawing*, 12<sup>th</sup> Edition. Pearson Education, 2003.  
*Architecture: Residential Drafting and Design*. Goodheart-Willcox, 2004.

## Course Pacing Guide

### **Course: Engineering Drafting And Design: CADDII**

<b>Course Unit (Topic)</b>	<b>Length of Instruction (Days/Periods)</b>
1 3-D Drawing	12 days
2. Architectural Design- Primary Considerations	4 days
3. Architectural Design- Site Planning	9 days
4. Floor Plans	10 days