

## **Attention Competitors**

**At the 2007 Provincial Skills Competition  
Safety is # 1**

**Each Event Area Will Have Safety Equipment  
and Requirements That Competitors Must  
Adhere To**

**Important Must Read!!!!**

**Competitors Must Meet All Safety Requirements  
To Compete At The Provincial Skills Competition**

**Please Consult The Scope Document To  
Determine The Safety Requirements For Your  
Area**

**It Is Recommended That Competitors Check The  
Scope Document To Ensure You Meet All Safety  
Requirements**

**Scope Documents May Be Updated Until April  
20th**

# 2007 Provincial Skills Competition

## Scope Document

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<b>EVENT:</b> MECHANICAL CAD	<b>LEVEL:</b> SECONDARY
<b>START TIME:</b> 9:00 AM JUNE 5 <sup>th</sup> , 2007	<b>LOCATION:</b> SIAST Kelsey Campus Room S117
<b>INTERNATIONAL TRADE #:</b> 05	<b>DURATION:</b> 6 HRS.

**SAFETY REQUIREMENTS:** Competitors are required to follow all industry safety standards during the competition.

### **PURPOSE OF THE CHALLENGE:**

This competition is intended to evaluate each contestant's skills and knowledge in Computer Assisted Drafting, specifically in creating detail and assembly drawings. The outstanding students in this field will then be recognized.

### **SKILLS AND KNOWLEDGE TO BE TESTED:**

1. Understand and use all features for producing a scaled CAD drawing, utilizing isometric and orthographic commands.
2. Understand and use written instructions for all drawing scales, standards and design criteria.
3. Correct use of CAD dimensioning tools and dimensioning practices.
4. Ability to draw using orthographic and auxiliary projection.
5. Correct use of drafting and design standards.
6. Ability to sketch.
7. Ability to use measuring tools.

### **SPECIFIC REQUIREMENTS:**

The competitor will be given a project where they should be prepared to measure, sketch, provide a presentation view, working drawings with dimensions and notes suitable for assembly and manufacture. From a given assembly drawing extract a part (parts) and fully dimension with notes symbols and geometric tolerances.

**Note \*\*** For the National competition students will also be required to make and assembly from detail drawing and Parametric modeling.

### **EQUIPMENT, TOOLS, SUPPLIES, CLOTHING:**

*Supplied by Committee:*

#### **Measuring Tools:**

- Venire caliper,
- ruler,
- protractor

#### **Hardware:**

- Compatible Pentium type microcomputers (IBM compatible).
- 1-3.5" High Density Diskette

***Software:***

- AutoCAD 2006
- Autodesk Inventor v10

**Note:** software and hardware listed is not mandatory, only suggested as what is used at the national level, other software or hardware must be approved by the Committee by February 15<sup>th</sup>, 2007.

***Supplied by Competitor:***

- Calculator
- Scale
- Notepad
- Pen / Pencil

***Competitor Must Provide:***

**CLOTHING REQUIREMENTS:**

**JUDGING CRITERIA:**

- Sketching 20%
- 2D Drawing with Dimensions 40%
- 3D Model/isometric 30%
- Subjective Ranking 10%

**COMMITTEE MEMBERS:**

- Wayne Grywacheski
- Lonny Holmes
- Arnold Neufeld
- Tim Braaten