



## 2012 Provincial Skills Canada Competition

### *Scope Document*

Edmonton Expo Centre, Edmonton

May 10 & 11, 2012

<b>EVENT:</b> Mechanical CADD	<b>LEVEL:</b> Secondary
<b>START TIME</b> May 10 <sup>th</sup> : 8:00 am May 11 <sup>th</sup> : 8:00 am	<b>LOCATION:</b> Hall B, Edmonton Expo Centre, Edmonton
<b>DURATION:</b> 10 hrs.	<b>REGIONALIZED EVENT:</b> No
<b>WORLDSKILLS TRADE #:</b> 5	

#### GENERAL DESCRIPTION

##### Purpose of the Challenge:

Evaluate each contestant's preparation for employment in the field of engineering design and drafting using CAD and to recognize outstanding students for excellence & professionalism in their field.

##### Skills and Knowledge to be Tested:

- Understand and use fundamental commands for producing a scaled 2D CAD drawing
- Use measuring instruments to calculate basic dimensional properties
- Use CAD software to produce 3D parametric models
- Use Geometric Dimensioning and Tolerancing (GD&T)

#### EQUIPMENT & MATERIALS

##### Equipment and Materials Competitors Must Supply:

- Calculator
- Pencils
- Measuring Instruments (calipers, scales)
- Reference Material (No photocopies allowed) – Textbooks, Handbooks. etc.
- USB Memory Stick

Please Note:

All other equipment must be approved by the Provincial Technical Committee.



### **Equipment and Materials supplied by Committee:**

- Windows based computer, monitor, & mouse
- Software
  - AutoCAD
  - Inventor
  - SolidWorks

Competitors who want to use other software must check with the technical chair .

### **Clothing Requirement**

Appropriate work clothing must be worn to compete. All clothing must be neat and clean and free of rips and tears. Casual wear such as shorts will not be permitted.

### **SAFETY**

The health, safety and welfare of all individuals involved with Skills Canada Alberta are of vital importance. Safety is a condition of participation with Skills Canada Alberta and shall not be sacrificed for the sake of expediency. At the discretion of the judges and technical committees, any competitor can be denied the right to participate should they not have the required proper safety equipment and/or act in an unsafe manner that can cause harm to themselves or others.

### **JUDGING CRITERIA**

Point Breakdown / 1000

Evaluation Criteria: Subjective and Objective

- Presentation
- Dimensioning
- Design accuracy

Please Note: A detailed evaluation criteria will be given at the contest.

### **TIE BREAKING PROCESS**

In the event of a tie, the winner will be determined by rank order of each task.

### **RELATED CAREER AND TECHNOLOGY STUDIES COURSES:**

Descriptions of all courses are located at the following website:

<http://education.alberta.ca/teachers/program/cts/program-of-studies/mdc.aspx>

DES1010: Sketch, Draw & Model

DES1020: The Design Process

DES1030: 2D Design 1 or DES1040: 3D Design 1

DES1050: CAD 1

DES1060: Technical Design & Drafting 1

DES2035: 2D Design 2 or DES2045: 3D Design 2

DES2055: CAD 2



DES2065: Technical Design 2  
DES3035: 2D Design 3 or DES3045: 3D Design 3  
DES3055: CAD 3  
DES3065: Technical Design 3

#### **ADDITIONAL NOTES**

Competitors may supply their own software, but must follow these guidelines:

- Software must be pre-approved by the committee 1 week in advance (pre-approval may be obtained by contacting the committee chair via his/her email address which is provided below)
- Competitors supplying their own software must supply their own computer system pre-loaded with their pre-approved software

#### **Competitor Registration**

The Provincial Skills Canada Competition (PSCC) registration will open online [www.skillsalberta.com](http://www.skillsalberta.com) on February 27<sup>th</sup>, 2012 at 8:00 am.

#### **Lunch**

Lunch for accredited competitors only will be provided by Skills Canada Alberta. Teacher accreditation can be purchased online at [www.skillsalberta.com](http://www.skillsalberta.com). Registration opens on February 27, 2012 at 8:00 am.

#### **Parking & Venue Maps**

<http://www.edmontonexpocentre.com/attend/parking/>

#### **Awards Ceremony**

The awards ceremony will take place on Friday May 11, 2012 at 5:30pm in Hall D of the Edmonton Expo Center. Admission is free and everyone is welcome to attend. The awards ceremony will be shown live at [www.skillsalberta.com](http://www.skillsalberta.com).

#### **Team Alberta Information**

Team Alberta will be selected at the Provincial Skills Canada Competition (PSCC) on May 10-11, 2012. Then two days later the gold medalists from PSCC will compete at the Skills Canada National Competition (SCNC) in Edmonton, Alberta. It is recommended that competitors review the SCNC scope documents to be familiar with the national scope and project.

[http://www.skillsalberta.com/index.php?option=com\\_content&task=view&id=226&Itemid=242](http://www.skillsalberta.com/index.php?option=com_content&task=view&id=226&Itemid=242)

During the PSCC Awards Ceremony on May 11 all students who earn a medal will be escorted backstage after we photograph their onstage moments of success. Gold medalists will be given their Team Alberta information package and will confirm their participation in the SCNC.

Students must be present at the Awards Ceremony to claim their position on Team Alberta. If the Gold medalist is not able to attend SCNC, the next top ranking individuals will be asked to participate.

Please prepare your students in advance to accept a position on Team Alberta and how your school will support their participation.



20th ANNUAL PROVINCIAL SKILLS CANADA COMPETITION

# SKILLS20

If a student is not able to attend the Awards Ceremony a letter confirming the student's interest in Team Alberta participation can be emailed to [kariz@skillscanada.com](mailto:kariz@skillscanada.com), otherwise the Team Alberta position will be offered to the silver medalist.

## COMMITTEE MEMBERS

Chris Serran  
Lloyd Bloomfield

csDesign Solutions  
Edmonton Public Schools

Questions or comments are welcome and may be directed to the committee chair, Chris Serran, at [cserran@gmail.com](mailto:cserran@gmail.com).