



17TH ONTARIO TECHNOLOGICAL SKILLS COMPETITION

ARCHITECTURAL CAD - SECONDARY LEVEL

CHAIR: Hanna Domagala, hannad@sentex.ca

****Gold medal winners will advance to the Canadian Skills Competition.**

PURPOSE OF THE CONTEST:

To evaluate each contestant's proficiency in the field of Architectural Design & Drafting using CAD software and recognize outstanding students for excellence and professionalism in this field.

SKILLS AND KNOWLEDGE TO BE TESTED:

The challenge will consist entirely of practical design & drafting work. There will be no written exam but a brief job skills interview with each contestant will be incorporated during competition time.

Contestants will demonstrate their ability to perform design and computer-aided drafting skills with efficiency and merit. The challenge will require the contestant to:

- Create accurate CAD drawings from preliminary design sketches
- Accurately dimension and annotate drawings for construction purposes
- Design efficient layouts
- Produce conventional and simple details
- Demonstrate an understanding of roof styles
- Demonstrate knowledge of the differences between presentation and working drawings
- Merge drawings from other files onto one page
- Create plot files and plot a drawing file
- Perform file management techniques using the operating system and hardware

This year's competition will focus on a residential adaptation of an existing structure.

EQUIPMENT AND MATERIALS:

Supplied by Committee:

- Each competitor is restricted to a table top work space approximately 36"x30"
 - Pentium II-550 computers running Windows '98 will be the minimum caliber of competition computer workstation. Mouse pointing device.
 - AutoCAD Architectural Desktop v2.0 as well as AutoCAD 2006 are the supplied software packages. SoftPlan version 12 is also available. Competitor's own software can be used at the discretion of the committee based on availability of a suitable machine and operating system. NO Mac OS computers are available. The competition will be designed so that the challenge may be completed regardless of the software being used.
 - Any required Building Code material or conversion tables will be provided.
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Supplied by Competitor:

- Scratch paper, graph paper, pens, pencils, calculators
- It is strongly recommended that all equipment be clearly labeled with the school and school board names
- Competitors may wear ear plugs or a “walkman” to help isolate competitor from external noise and distractions
- Metric (mm) and Imperial (inch) measuring scales
- Use of reference materials or software manual will NOT be permitted during competition
- Any materials brought by competitors are subject to approval by the technical committee

ADDITIONAL INFORMATION:

1. Scoring of problem solutions completed on the computer will be done either from a hard copy plot and/or “on screen” depending on the time/equipment constraints. As part of the competition requirements, work files must be saved on the hard drive and a backup diskette provided by Skills Canada.
2. Work shall remain on the computer display until cleared by competition officials. The computer is to be left at the competition site in fully operational condition until released by competition officials.
3. Competitors may be required to work in either Metric (mm) or Imperial (inch) units.
4. Each competitor will be responsible for establishing the plotting procedures at the computer and for plotting their own work to a printer or plot file on a floppy disk.
5. During competition, the competitor will work independently. During the competition, competitors may not communicate with anyone except competition officials. Failure to comply with this rule may lead to the competitor being disqualified from the competition.
6. Competitors arriving late for the competition will not be given extra time.
7. Sketching and note taking during the competition are permitted.

TIME TABLE

7:00 – 7:30	Registration
7:30 – 8:00	Orientation
8:00 – 14:30	Competition (1/2 lunch included)

JUDGING CRITERIA:

It is anticipated that the challenge project will consist of the following drawings evaluated as shown:

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|------------------------|--|
| 1. Floor Plan(s) | Completeness, Design & Layout, Annotation & Dimensioning |
| 2. Elevation(s) | Completeness, Design & Layout, Annotation & Dimensioning |
| 3. Building Section(s) | Completeness, Design & Layout, Annotation & Dimensioning |
| 4. Detail(s) | Completeness, Design & Layout, Annotation & Dimensioning |
| 5. Site Plan | Completeness, Design & Layout, Annotation & Dimensioning |
| 5. Job Interview | |

Total Possible score is 100%.

JOB INTERVIEW:

To assist competitors in fully preparing for their eventual job searches and to become valued employees, there will be a **5 minute** job interview incorporated into this contest, worth 5% of the competitor's overall mark.. It is expected that the competitors arrive prepared **WITH A RÉSUMÉ** and be ready for interview questions and discussion. Feedback will be provided to the competitors in order to help prepare them for the real-life experience of job interviews.
