



**April 11, 2019**  
**22nd ANNUAL SKILLS MANITOBA COMPETITION**  
**CONTEST DESCRIPTION**

**CONTEST NAME:** Architectural Technology and Design (Secondary)

**CONTEST NO:** 52

**LEVEL:** Secondary – up to four competitors per school. (Actual number of competitors per school may be reduced if room capacity is exceeded).

**CONTEST LOCATION:** Rooms J121/123 Red River College - Notre Dame Campus

**CONTEST DURATION AND START TIME:**

**4 hours**, beginning at 8:30 AM. Competitors meet in room J121/123.

**PURPOSE OF CHALLENGE:**

Assess the contestant's skills in performing **design and drawing** tasks.

To assess the competitors' abilities to apply the following key themes:

Architecture - envelope design, space planning, and materials selection.

Engineering - structural systems and spans.

Construction - regulatory building codes, assembly, and use of drawing tools.

**SKILLS AND KNOWLEDGE TO BE TESTED:**

Computer Aided Design Drafting (CADD). The contestant will be challenged with interpreting instructions, working with scales or other measuring devices, and reading drawings.

Students will develop presentation format, and/or working format, **floor plan and elevation drawings**.

Student design and drawings will adhere to Section 9 of the National Building Code.

**ASSESSMENT: POINT BREAKDOWN (100 POINTS):**

*In the event of a tie in scoring, the tie will be broken by the judge's re-evaluation of the relevant documents of the tied competitors.*

Design Solutions: Meet specifications, requirements, and are realistic and buildable.	20
Technical Drawings: Accurate, complete, and to drafting standards.	40
Presentation Drawings: Accurate, complete, and communicate design intent.	20
Compliance to National Building Code: Designs and drawings apply CMHC "Canadian Wood- Frame House Construction" content.	20
Total	100

**NATIONAL COMPETITION ELIGIBILITY:**

- A mark of **70% or higher** must be scored by the gold medalist in order to attend the National Skills Competition

### **EQUIPMENT, TOOLS, MATERIALS TO BE PROVIDED BY COMMITTEE:**

The organizing committee will provide the following:

- Windows compatible hardware loaded with Autodesk **AutoCAD 2015, AutoCAD Architecture 2015 and Revit Architecture 2015.**  
(or newer versions if available)
- Monochrome laser printer (11x17)

No software reference manuals, textbooks or electronic data will be permitted for the duration of the competition. (See exceptions below).

Only drawing files submitted to the contestant during the contest will be authorized for use.

### **EQUIPMENT, TOOLS, MATERIALS TO BE SUPPLIED BY COMPETITOR:**

The competitor will provide the following:

- Architectural Scale (imperial)
- Calculator
- Pencil and sketch paper
- CMHC "Canadian Wood-Frame House Construction" reference (printed or digital version).
- New or formatted USB Flash Memory Stick. (No electronic files permitted other than the "Canadian Wood-Frame House Construction" digital version.

### **WORKSITE SAFETY RULES / REQUIREMENTS:**

N/A

### **THE IMPORTANCE OF ESSENTIAL SKILLS FOR CAREERS IN THE SKILLED TRADES;**

Essential skills are used in nearly every job and at different levels of complexity. They provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change. Good Essential Skills means you will understand and remember concepts introduced in technical training. The level of Essential Skills required for most trades is as high as or higher than it is for many office jobs.

The following 9 skills have been identified and validated as key essential skills for the workplace: Numeracy, Oral Communication, Working with Others, Continuous Learning, Reading Text, Writing, Thinking, Document Use, Digital.

Top Essential Skills for Architectural Technology and Design: Document Use and Numeracy

## **TECHNICAL COMMITTEE MEMBERS CONTACT INFORMATION:**

Gordon MacRae  
Design Drafting Teacher  
[Tec Voc High School](#)  
1555 Wall St.  
Winnipeg, MB  
R3E 2S2  
204 786-1401 ext 577  
([gmacrae@wsd1.org](mailto:gmacrae@wsd1.org))