



SCNC
SKILLS CANADA
NATIONAL
COMPETITION



OCMT
OLYMPIADES
CANADIENNES
DES MÉTIERS
ET DES
TECHNOLOGIES


SkillsCompétences
Canada
Halifax2019

CONTEST DESCRIPTION / DESCRIPTION DE CONCOURS

ARCHITECTURAL
TECHNOLOGY &
DESIGN

DESSIN ET
TECHNOLOGIE
ARCHITECTURALE

SECONDARY / NIVEAU SECONDAIRE



Table of Contents

| | | |
|----------|--|----------|
| 1 | THE ESSENTIAL SKILLS FOR CAREERS IN THE SKILLED TRADES AND TECHNOLOGY | 3 |
| 2 | CONTEST INTRODUCTION | 3 |
| 3 | CONTEST DESCRIPTION | 4 |
| 4 | EQUIPMENT, MATERIAL, CLOTHING | 4 |
| 5 | SAFETY REQUIREMENTS | 6 |
| 6 | ASSESSMENT | 6 |
| 7 | CONTEST SPECIFIC RULES | 7 |
| 8 | ADDITIONAL INFORMATION | 8 |
| 9 | NATIONAL TECHNICAL COMMITTEE MEMBERS | 8 |

1 THE ESSENTIAL SKILLS FOR CAREERS IN THE SKILLED TRADES AND TECHNOLOGY

SCC is currently working with Employment and Social Development Canada (ESDC) in order to bring awareness to the importance of Essential Skills that are absolutely crucial for success in the workforce. Part of this ongoing initiative requires the integration and identification of Essential Skills in contest descriptions, projects, and project documents. The next phase and very important aspect of our Essential Skills (ES) initiative is to provide an ES report card to each competitor at the Skills Canada National Competition. The purpose of the ES report card is to inform the competitor about their current level of essential skills based on their competition scores. With this knowledge, the competitor will be made aware which essential skill may require improvement. Full implementation is expected in the next Skills Canada National Competition.

The following 9 skills have been identified and validated as key essential skills for the workplace in the legend below:

¹Numeracy, ²Oral Communication, ³Working with Others, ⁴Continuous Learning, ⁵Reading Text, ⁶Writing, ⁷Thinking, ⁸Document Use, ⁹Digital

These essential skills have been identified in section 2.4 and/or 3.2 of your Contest Description and if applicable, in your Project and all other supporting project documents.

2 CONTEST INTRODUCTION

2.1 Description of the associated work role(s) or occupation(s).

<http://skillscompetencescanada.com/en/careers/information-technology/architectural-technology-design/>

2.2 Purpose of the Challenge.

To assess the competitor's skills in performing design and drawing tasks.

To assess the competitor's abilities to apply the following key themes:

- Architecture - envelope design, space planning, materials selection
- Knowledge of Canadian Wood-Frame House Construction, CMHC
- Engineering - structural systems and spans
- Construction - regulatory building codes and knowledge of construction assemblies

2.3 Duration of contest.

12 hours

2.4 Skills and Knowledge to be tested

Prior to the arriving at the competition, each competitor shall create a imperial 11x17 size template with the title block containing the information provided in the example posted on the Skills/Compétences Canada website, and have this template accessible on their computer for use during the competition.

3 CONTEST DESCRIPTION

3.1 List of documents produced and timeline for when competitors have access to the documents.

| DOCUMENT | DATE OF DISTRIBUTION VIA WEBSITE |
|-------------------------------|----------------------------------|
| Sample Title Block | March 1, 2019 |
| Competition Drawing Standards | March 1, 2019 |

3.2 Tasks that may be performed during the contest

- Preparation of Working/Construction Drawings and Presentation Drawings⁸
- BIM / CADD⁹
- Planning and design concepts⁷
- Measuring/scaling, detailing and sketching skill¹
- Wood frame construction
- Open Book Quiz based on Canadian Wood-Frame House Construction, CMHC.⁷
- Evaluation of spatial perception

Note: Competition project will include floor plans, elevations, section(s) and construction detail(s).

Essential Skills – ¹Numeracy, ⁷Thinking (Critical, Significant Use of Memory), ⁸Document Use, ⁹Digital

4 EQUIPMENT, MATERIAL, CLOTHING

4.1 Equipment and material provided by Skills/Compétences Canada

- Laser printer (11x17) and/or plotter
- Table and chair
- 120VAC power supply

4.2 Equipment and material provided by the competitor.

- Windows compatible hardware
- Autodesk Products (AutoCAD, AutoCAD Architecture, Revit) (Current Year or Most Recent Version)
- No internet access during competition
- PDF creation software (ie. Adobe Acrobat Writer)
- If competitors are bringing a computer or laptop from their school (instead of their personal computer), please ensure that the computer is unlocked so documents and possibly software can be saved/installed to the hard drive and technology support can be provided onsite. This may require access to CMOS settings.
- Canadian Wood-Frame House Construction, published by CMHC will be permitted. (Digital or Hardcopy)
- Scales (metric and imperial)
- Calculator
- Pencil
- Paper
- Empty USB Drive
- Software reference manuals, Textbooks and Electronic data (e.g. CD or diskette) will **not** be permitted

4.3 Required clothing provided by the competitor.

- N/A

5 SAFETY REQUIREMENTS

5.1 Safety workshop

Upon arrival at the Skill area, Competitors will participate in a Safety workshop and they will be expected to work and maintain a safe working area during the competition. Any Competitor breaking any health, safety and environmental rules, may be required to undertake a second safety workshop, this will not affect the Competitor's competition time.

5.2 Personal protective equipment (PPE) provided by Skills/Compétences Canada

- No PPE required

5.3 Personal protective equipment (PPE) provided by competitors

- No PPE required

6 ASSESSMENT

6.1 Point breakdown

| POINT BREAKDOWN | /100 |
|---|------|
| Day 1 - Working/Presentation Drawing(s) | 45 |
| Day 2 - Working/Presentation Drawing(s) | 55 |

7 CONTEST SPECIFIC RULES

Contest specific rules cannot contradict or take priority over the Competition Rules. They do provide specific details and clarity in areas that may vary from contest to contest. Any additional contest rules will be reviewed during competitor orientation

| TOPIC/TASK | CONTEST SPECIFIC RULE |
|---|---|
| Use of Resource Materials | <ul style="list-style-type: none"> The only resource permitted is the CMHC Wood Frame Handbook. Failure to comply with this rule will result in disqualification. |
| Use of technology - Internet | <ul style="list-style-type: none"> There will be no access to the Internet during the competition. Failure to comply with this rule will result in disqualification. |
| Use of technology – Mobile phones and music | <ul style="list-style-type: none"> MP3 players or cell phones on airplane mode are permitted during the competition to listen to music provided the competitor wears headphones or earbuds. During the competition, competitors are not permitted to use their cell phones for calling, texting or accessing the internet. <u>Failure to comply with this rule will result in disqualification.</u> |
| Hardware | <ul style="list-style-type: none"> Computers must remain onsite from Orientation to the conclusion of the competition. No electronic drawing files are permitted to be brought into the competition. The competitor is required to ensure that their computer only contains software application files. Failure to comply with this rule will result in disqualification. Only default software libraries, families, blocks, and components are permitted to use during the competition. NTC Members will verify compliance during Orientation. |
| Malfunction of Software/Hardware | <ul style="list-style-type: none"> Technical support for software will not be provided during the competition. If your hardware/software malfunctions you will be provided the equivalent down time to complete the competition up to a maximum of 60 minutes per day. |

8 ADDITIONAL INFORMATION

8.1 Interpreter

If a competitor requires the help of an interpreter once onsite during the competition, the Skills/Compétences Canada Provincial/Territorial offices must advise Skills/Compétences Canada National Secretariat a minimum of 1 month prior to the competition or this service might not be guaranteed.

8.2 Ties

- Tiebreaker #1: The competitor with the highest score in the Working/Construction Drawings of the Floor Plan Component of the test will be declared the winner.
- Tiebreaker #2: The competitor with the highest score in the Elevation(s) Component of the test will be declared the winner.
- Tiebreaker #3: The competitor with the highest score in the Wall Section(s) Component of the test will be declared a winner.

8.3 Competition rules

Please refer to the competition rules of the Skills Canada National Competition which can be found on the Skills/Compétences Canada website.

9 NATIONAL TECHNICAL COMMITTEE MEMBERS

| Member Organization | Name |
|---------------------------|---------------------|
| Ontario - Chair | Joel Foster |
| Saskatchewan – Co-Chair | Andrea Clayton |
| Alberta | William Thompson |
| British Columbia | Wes Macaulay |
| Manitoba | Scott Fraser |
| Prince Edward Island | Bruceyene M-Collins |
| Quebec | Sylvie Faber |
| Nova Scotia | Jeff Nash |
| Newfoundland and Labrador | Mike Foley |

Contact the Skills/Compétences Canada national secretariat for any questions or concerns: Nathalie Maisonneuve (nathaliem@skillscanada.com).