



**SCNC**  
**SKILLS CANADA**  
**NATIONAL**  
**COMPETITION**



**OCMT**  
**OLYMPIADES**  
**CANADIENNES**  
**DES MÉTIERS**  
**ET DES**  
**TECHNOLOGIES**

  
**SkillsCompétences**  
**Canada**  
Halifax2019

CONTEST DESCRIPTION / DESCRIPTION DE CONCOURS

# **WEB DESIGN AND DEVELOPMENT CONCEPT ET CRÉATION DE SITES WEB**

SECONDARY / NIVEAU SECONDAIRE



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## **1 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:

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

These essential skills have been identified in section 2.4 and 3.2 of your Contest Description and if application, in your Project and supporting documents.

## **2 CONTEST INTRODUCTION**

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

<http://skillscompetencescanada.com/en/skills/information-technology/website-development/>

### **2.2 Purpose of the Challenge.**

To provide competitors with the opportunity to demonstrate through practical application their skills in client- and server-side Web design and development.

### **2.3 Duration of contest.**

12 hours

## 2.4 Skills and Knowledge to be tested.

- This modular competition will test the competitor's knowledge and skills dealing with:
  - Graphics for the Web<sup>9</sup>
  - Web design principles<sup>9</sup>
  - HTML 5<sup>9</sup>
  - CSS 9
  - JavaScript<sup>9</sup>
  - jQuery<sup>7</sup>
  - XAMPP 7 (Apache HTTP Server, MariaDB, and PHP, phpMyAdmin)<sup>9</sup>

*Essential Skills – 7Thinking (Problem Solving), 9Digital*

## 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
Judging Criteria	January, 2019
Test Project	January, 2019

### 3.2 Tasks that may be performed during the competition:

- Use standard (X)HTML and CSS to create accessible and usable Web pages.<sup>9</sup>
- Create responsive Web page designs that utilize are viewable in modern Web browsers (Mozilla Firefox, Google Chrome, Microsoft Edge, Apple Safari) and on numerous devices (desktop computer, tablet computer, smartphone).<sup>9</sup>
- Create, manipulate, and optimize raster and vector graphics.<sup>9</sup>
- Write JavaScript code and utilize libraries in order to enhance the overall user experience of Web solutions<sup>7,9</sup>
- Write JavaScript and PHP programs given a set of functional requirements.<sup>5,7</sup>
- Use relational databases with MariaDB, and write programs that operate on persistent data.<sup>7,9</sup>
- Refactor and debug client- and server-side code.<sup>7</sup>

*Essential Skills – <sup>5</sup>Reading Text, <sup>7</sup>Thinking (Problem Solving, Critical Thinking), <sup>9</sup>Digital*

## 4 EQUIPMENT, MATERIAL, CLOTHING

### 4.1 Equipment and material provided by Skills/Compétences Canada

- Work desk and ergonomic chair

#### 4.2 Equipment and material provided by the competitor

- Headphones, MP3 player or Phone (phone must be in airplane mode with wifi turned off)
- Laptop with Windows 10 Operating System - competitor has Administrative privileges on laptop
- May bring: Mouse and external keyboard (to work with laptop)
- 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.

**COMPETITORS WILL BE REQUIRED TO USE THE MATERIAL AND EQUIPMENT PROVIDED BY SCC. ALL OTHER MATERIAL AND EQUIPMENT WILL BE REMOVED FROM THE SKILL AREA.**

#### 4.3 Required clothing provided by the competitor

- Competitors must be dressed in a business casual attire

### 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 the competitor

- No PPE required

## 6 ASSESSMENT

### 6.1 Point breakdown

POINT BREAKDOWN	/100
Module A: Design	25
Module B: Debugging	25
Module C: Game	50

## 7 ADDITIONAL INFORMATION

### 7.1 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.

### 7.2 Test Project change at the Competition

Where the Test Project has been circulated to Competitors in advance, NTC shall change a maximum of 30% of the work content. Please refer to the Competition Rules.

### 7.3 Ties

- Tiebreaker #1: The competitor with the highest score in the Measurement criteria will be declared the winner.
- Tiebreaker #2: The competitor with the highest score in the Module C (measurement marks) combined will be declared the winner.
- Tiebreaker #3: The competitor with the highest score in the Module B (measurement marks) combined will be declared the winner.

### 7.4 Competition rules

Refer to the [competition rules](#) of the Skills Canada National Competition which can be found on our website.

## 8 NATIONAL TECHNICAL COMMITTEE MEMBERS

Member Organization	Name
Ontario	Dalibor Dvorski
Saskatchewan - Chair	Jeff Boulton
Manitoba	Sean Taylor
Newfoundland and Labrador – Co-Chair	David Cantwell
Alberta	Matt Waggoner

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