

CONTEST DESCRIPTION

# **IT Office Software Applications**

POST-SECONDARY



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### 1 THE SKILLS FOR SUCCESS FOR CAREERS IN THE SKILLED TRADES AND TECHNOLOGY

In response to the evolving labour market and changing skill needs, the Government of Canada has launched the new Skills for Success (former Essential *Skills*) model defining nine key skills needed by Canadians to participate in work, in education and training, and in modern society more broadly. SCC is currently working with Employment and Social Development Canada (ESDC) to bring awareness of the importance of these skills that are crucial for success in Trade and Technology careers. Part of this ongoing initiative requires the integration and identification of the Skills for Success in contest descriptions, projects, and project documents. The next phase and very important aspect of our Skills for Success (SfS) initiative is to provide a *Skills Report Card* to each competitor at the Skills Canada National Competition. The purpose of the report card is to inform the competitor about their current level of nine identified Skills for Success based on their competition scores. With this knowledge, the competitor will be made aware which 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 skills for success for the workplace in the legend below:

<sup>1</sup>Numeracy, <sup>2</sup>Communication, <sup>3</sup>Collaboration, <sup>4</sup>Adaptability, <sup>5</sup>Reading, <sup>6</sup>Writing, <sup>7</sup>Problem Solving, <sup>8</sup>Creativity and Innovation, <sup>9</sup>Digital

These Skills for Success have been identified in section 2.4 and 3.2 of your Contest Description and if applicable, in your Project and supporting documents.

# 2 CONTEST INTRODUCTION

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

https://www.skillscompetencescanada.com/en/skill\_area/it-office-softwareapplications/

### 2.2 Purpose of the Challenge

The rapid pace of globalization over the past decade has been largely driven by developments in Information Communication Technology (ICT). IT specialists are increasingly in great demand in several areas, one of which is in providing solutions for business.

These professionals are not merely users of Microsoft Office; they are power users who have an intricate knowledge of each of the applications in the suite. Their skills may be used in a plethora of ways across a multitude of industries, cultures, and languages.

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Microsoft Office is by far the most widely used suite of office applications throughout the world, therefore, making Software Solutions professionals highly employable members of the IT business community. There are thousands of businesses that are undoubtedly in need of better training in the use of these office applications and will often benefit greatly from having customized solutions developed for them that suit their individual needs.

# What do IT Software Solutions professionals do?

- Develop solutions to businesses' problems
- Use Microsoft Office as a framework to build software solutions
- Analyze business requirements to create well-fitting solutions
- Use problem-solving skills and in-depth technical knowledge to build those solutions
- Use communication skills to document their creations in an easy-tounderstand way
- Use communication and marketing skills to present their solutions to clients

### Where do IT Software Solutions professionals work?

IT Software Solutions professionals are employed throughout the following:

- Large enterprises
- Medium-sized businesses
- Small businesses
- As freelancers

They can operate in a wide variety of roles:

- In a support role
- In a training role
- In a development role
  - Providing customization and automation
  - Developing totally customized software solutions to a business' requirements
- In a business analyst role providing the data required to enable decision making
- In the daily activities of a company
  - Simplifying and improving routine office and business activities
- **2.3** Duration of contest

10 hours

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**2.4** Skills and Knowledge to be tested.

Using the software available<sup>9</sup>, competitors will be required to solve a series of problems.<sup>7</sup> They will work independently while making judgements over the two days of competition according to the specifications given in the project material.<sup>5</sup> The ability to access, store, and use files is important.<sup>9</sup>

Skills for Success – <sup>5</sup>Reading, <sup>7</sup>Problem Solving,<sup>9</sup>Digital

# **3 CONTEST DESCRIPTION**

- **3.1** List of documents produced and timeline for when competitors have access to the documents on the Skills/Compétences Canada website.
  - No other competition documents will be released prior to the competition.
- **3.2** Tasks that may be performed during the competition.

# Database

Competitors will be expected to use the full functionality of Microsoft Access. Database design skills will be required.<sup>9</sup>

### Create and/or modify a database<sup>7,9</sup>

Competitors must know and understand the following:

- The importance of using industry-accepted conventions for the naming of database objects
- The need for standardization in the naming of fields
- How to ensure data integrity
- How to ensure security
- How to avoid data redundancy
- How to problem solve

Competitors must be able to perform the following:

- Set up tables with correct fields, keys and data types
- Apply table and field properties (validation rules, input masks, lookups, etc.)
- Import data from a variety of sources and in a variety of formats
- Designate primary and foreign keys
- Set up correct relationships between tables
- Provide for database security, protection, and permissions

# Design and use forms<sup>9</sup>

Competitors must know and understand the following:

• How to create a form to a specified design and layout

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Competitors must be able to perform the following:

- Create forms and sub forms for a range of uses
- Control data entry through forms
- Create calculated fields
- Add and set up appropriate controls in forms
- Control record navigation in a form
- Set properties

### Query a database<sup>1,9</sup>

Competitors must know and understand the following:

• How to design and execute queries to generate results as specified

Competitors must be able to perform the following:

- Filter and search records
- Construct and use select, parameter, and action queries
- Add a calculated field to a query
- Perform calculations on a record grouping
- Create new fields based on existing fields

### Design and use reports 5,6,9

Competitors must know and understand the following:

• How to design and produce reports to generate results as specified

Competitors must be able to perform the following:

- Produce and modify reports (simple, grouped, summary, and sub-reports) following a stated layout and format
- Set report properties
- Use calculated fields in reports
- Format a report for printing

### Share data across applications<sup>5,9</sup>

Competitors must know and understand the following:

- How to extract and use data from other applications that may be in differing file formats
- How to output data from Access to other applications

Competitors must be able to perform the following:

- Import and export data according to specifications.
- Integrate data with external sources.

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# Customize and automate processes<sup>9</sup>

Competitors must know and understand the following:

- How to create and design the interface to suit client requirements as specified
- How to provide the user with options for simple execution of complex processes

Competitors must be able to perform the following:

- Automate loading and display of objects.
- Create and use macros to automate processes.
- Customize the Access environment.

# **Spreadsheets**

Competitors will be expected to use the full functionality of Microsoft Excel; however, competitors will not be expected to have in-depth knowledge or expertise in any particular field (e.g., financial, engineering, statistical, mathematical, etc.)

### Construct a spreadsheet<sup>1,9</sup>

Competitors must know and understand the following:

• The power of a well-designed and well-constructed spreadsheet is to improve business productivity and aid decision making with its powerful data analysis and reporting functions.

Competitors should be able to:

- Use formulas as required.
- Create, modify, and format spreadsheets using the full range of Excel's formatting features including conditional formatting.
- Use a variety of built-in functions (statistical, mathematical, text, logical, financial, date, and time).

# Use design and analysis tools 5,7,9

Competitors must know and understand the following:

• How to design and use analysis tools in Excel

Competitors should be able to:

- Perform What-If Analysis using Goal Seek / Solver / Scenario Manager
- Analyze Data Using PivotTables and Pivot Charts

# Use data and table functions<sup>5,9</sup>

Competitors must know and understand the following:

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• How to manage and analyze data

Competitors should be able to:

- Define and apply data filters
- Use the sub-totalling feature
- Query spreadsheet data
- Set up and apply validation rules to spreadsheet data
- Create and analyze amortization table

### Share data across applications<sup>9</sup>

Competitors must know and understand the following:

- How to extract and use data from other applications that may be in differing file formats
- How to output data from Excel to other applications

Competitors must be able to perform the following:

- Import and export data according to specifications.
- Integrate data with external sources.

### Print spreadsheets9

Competitors must know and understand the following:

• How to set up worksheets and workbooks for printing

Competitors must be able to perform the following:

Set printing options to output a chart, worksheet, workbook, and PivotTable report according to specifications.

### Charts and graphs

Competitors must know and understand the following:

• How to present spreadsheet data in various graphical formats

Competitors must be able to perform the following:<sup>5,6,7,9</sup>

- Create, modify, and format the full range of charts according to specifications.
- Create dynamic charts.
- Create and use PivotTables and Pivot Charts

### Customize and automate processes<sup>9</sup>

Competitors must know and understand the following:

• How to create and design the interface to suit client requirements as specified

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How to provide the user with options for simple execution of complex processes

Competitors must be able to perform the following:

- Automate loading and display of objects.
- Create and use macros to automate processes.
- Hide/unhide/freeze rows and columns.
- Set up templates with appropriate protection.
- Customize the Excel environment.
- Customize an Excel worksheet.
- Enhance worksheets using themes.
- Work with comments.

### Use graphical objects<sup>9</sup>

Competitors must know and understand the following:

• How to enhance visual appeal using graphic objects

Competitors must be able to perform the following:

- Insert, modify, and format graphic objects.
- Change the order of layered graphic objects.
- Group graphic objects.

# Use multiple workbooks

Competitors must know and understand the following:

• How to work with multiple workbooks

Competitors must be able to perform the following:<sup>5,6,9</sup>

- Create a workspace.
- Consolidate data.
- Link cells in different workbooks.
- Edit links.

### Use auditing features

Competitors must know and understand the following:

• The importance of controlling data accuracy through auditing

Competitors must be able to perform the following:<sup>6,9</sup>

- Trace cells
- Troubleshoot errors in formulas

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- Troubleshoot invalid data and formulas
- Watch and evaluate formulas
- Create a data list outline

# **Word Processing**

Competitors will be expected to use the full functionality of Microsoft Word efficiently.

### Create a document<sup>5,6,9</sup>

Competitors must know and understand the following:

• How to design, create, and modify a range of business documents

Competitors must be able to perform the following:

- Apply the full range of text, paragraph, page, and document formatting
- Create, edit, and format tables
- Create and modify charts
- Insert, draw, modify, and manipulate graphical objects

### Mail merge<sup>5,9</sup>

Competitors must know and understand the following:

• How to generate mass-mailing documents

Competitors must be able to perform the following:

- Set up a main document.
- Connect the document to a data source.
- Refine the list of recipients by sorting and filtering data.
- Apply conditions and rules.

# **Referencing**

Competitors must know and understand the following:

• How to set up and apply the referencing features of Microsoft Word

Competitors must be able to perform the following:<sup>5,6,9</sup>

- Set up and use indexes, cross-references, captions, tables of contents, and bibliography
- Set up and use footnotes and endnotes
- Use fields and calculations in documents
- Create, manage, revise, and distribute long documents and forms
- Prepare documents for printing or for publishing electronically

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### Share data across applications<sup>5,9</sup>

Competitors must know and understand the following:

- How to extract and use data from other applications that may be in differing file formats
- How to output data from Word to other applications

Competitors must be able to perform the following:

- Import and export data according to specifications
- Integrate data with external sources

### Customize and automate processes<sup>9</sup>

Competitors must know and understand the following:

- How to create a custom layout using a template
- How to create a template
- How to create and use forms

Competitors must be able to perform the following:

- Create and use macros to automate processes
- Provide user interactivity by means of forms and fields
- Protect forms
- Create, edit, and apply themes to documents
- Create, modify, and use templates

# **Presentations**

Competitors will be expected to use the full functionality of Microsoft PowerPoint. Drawing and modifying of graphical objects will be limited to the capabilities of PowerPoint; no drawing packages will be used in the competition.

### Create a presentation<sup>9</sup>

Competitors must know and understand the following:

• How to design, create, and modify a presentation according to given specifications

Competitors must be able to perform the following:

- Create and modify slides using a variety of layouts, sizes, and formats
- Use text effects
- Include tables and charts in a presentation
- Import data (text, spreadsheet, charts, and database)

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• Hide/unhide slides

### Add special effects to presentations<sup>9</sup>

Competitors must know and understand the following:

• How to add special effects to presentations according to given specifications

Competitors must be able to perform the following:

- Add multimedia elements
- Customize slide component animation
- Insert and edit media files and playback specifications (movie or sound)

### Add graphical objects to a presentation<sup>9</sup>

Competitors must know and understand the following:

 How to create, format, and apply graphical objects to a presentation according to given specifications

Competitors must be able to perform the following:

- Insert and manipulate illustrations, for example:
  - o Shapes
  - o WordArt
  - o SmartArt
  - o Diagrams
  - Graphical Objects
- Modify and work with objects:
  - Change object orientation
  - Format objects
  - Group and ungroup objects
  - Arrange objects
  - Save graphics in various formats

# Customize and automate processes<sup>9</sup>

Competitors must know and understand the following:

- How to customize a design template
- How to use timings, animations, and transitions
- How to create and design the interface to suit client requirements as specified
- How to provide the user with options for simple execution of complex processes

Competitors must be able to perform the following:

- Display objects using timings, animations, and transitions
- Create, modify, and use templates

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- Set up a slide master
- Customize slide layouts
- Create custom themes
- Customize bullets
- Add common slide information
- Modify the notes master
- Modify the handout master

### Prepare a presentation for delivery<sup>9</sup>

Competitors must know and understand the following:

• The importance of professionalism in preparing a slide show for delivery according to given specifications

Competitors must be able to perform the following:

- Arrange slides
- Add transitions
- Apply animation effects
- Execute other programs during a slideshow
- Create speaker notes
- Print a presentation
- Package a presentation
- Set up a custom show
- Annotate a presentation
- Create a presenter-independent slide show
- Set up and apply automatic timings to a slideshow

Skills for Success: <sup>1</sup>Numeracy, <sup>5</sup>Reading, <sup>6</sup>Writing, <sup>7</sup>Problem Solving, <sup>9</sup>Digital

# 4 EQUIPMENT, MATERIAL, CLOTHING

- 4.1 Equipment and material provided by Skills/Compétences Canada
  - USB Key
  - Table and stenochair
  - Monitors the competitors have the option to work with two external monitors during the competition.
  - External keyboard

### 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.

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**4.2** Equipment and material provided by the competitor as listed below.

Competitors are required to bring their own device (BYOD) for the competition. Each PC (no Apple products permitted due to incompatibility with Microsoft Access) device will require the following specifications:

- English or French keyboard depending on competitor's preference.
- Ear plugs for noise reduction
- No internet access during competition
- Software:
  - Windows 7 or greater operating system (French and/or English version)
  - Microsoft Office 2016, 2019, or Office 365 (French and/or English version)
    - Word
    - PowerPoint
    - Excel
    - Access

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. Competitors should make sure that no data files are on their device prior to the test. Computers will be checked by Skills Competition members prior to starting the competition each morning. Be prepared to create a new user profile on your laptop for use during the competition.

- **4.3** Required clothing provided by the competitor.
  - Competitors should be dressed appropriately and comfortably.
  - Competitors may wear their provincial shirts or Skills Canada provided attire if they desire.

### 5 HEALTH AND SAFETY

5.1 Safety program

SCC has implemented a comprehensive safety program as health and safety is an integral part of our competitions. Our safety program includes guidelines and procedures to make the work environment in each skill area safer.

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5.1.1 Safety manual

As part of our program a safety manual has been created to monitor and document health and safety within each skill area. It includes a definite plan of action designed to prevent accidents. The safety manual will be provided for every skill and these instructions must be followed and respected by all participants and officials at the SCNC.

5.1.2 Safety workshop

During orientation, 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** List of required personal protective equipment (PPE) provided by Skills/Compétences Canada
  - No PPE required
- **5.3** List of required personal protective equipment (PPE) provided by the competitor.
  - No PPE required

**Note**: Competitors who do not have the required protective equipment will not be allowed to participate in the competition.

### 6 ASSESSMENT

- 6.1 Point breakdown
- **Note:** This list is subject to change.

TASKS	/100
Word	25
Excel	25
PowerPoint	25
Access	25

# 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 the competitor orientation.

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TOPIC/TASK	CONTEST SPECIFIC RULE				
Use of technology -	Competitors are allowed to bring or use personal				
mobile phones and music	mobile phones into the skill area if it is in airplane				
	mode and the phone is upright on the table				
	Phones may be checked by NTC members				
	Competitors are allowed to listen to music using electronic devices				
	Competitors must wear earphones while listening to music				
Use of technology - Internet	Competitors are prohibited to use the internet during the competition				

# 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 may not be guaranteed.

#### 8.2 Ties

- Tiebreaker #1: In the event of a tie, the competitor with the highest score in the **Access** will be declared the winner.
- Tiebreaker #2: If a second tie occurs, the competitor with the highest score in the **Word** project will be declared the winner.
- Tiebreaker #3: If a third tie occurs, the competitor with the highest score in the **Excel** project will be declared the winner.

#### **8.3** Competition rules

Refer to the competition rules of the Skills Canada National Competition which can be found on our website.

# 9 NATIONAL TECHNICAL COMMITTEE MEMBERS

MEMBER ORGANIZATION	NAME
Newfoundland and Labrador	Cathy Goodwin
Nova Scotia	Kurt Lanigan
Quebec	Lucie Ranger – Co-Chair
Ontario	Liz Stacey
Saskatchewan	Cindy Lowe
British Columbia	Brenda Ridgeley-Ketchell – Chair

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

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