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2018

# SCNC

SKILLS CANADA  
NATIONAL COMPETITION

# OCMT

OLYMPIADES CANADIENNES  
DES MÉTIERS ET  
DES TECHNOLOGIES



skillsCompétences  
Canada  
Edmonton2018

CONTEST DESCRIPTION / DESCRIPTION DE CONCOURS

# IT OFFICE SOFTWARE APPLICATIONS

## TI-APPLICATIONS DE LOGICIELS BUREAUTIQUES

POST- SECONDARY /  
NIVEAUX POSTSECONDAIRE



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## 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:

<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 with in section 2.3 and/or 3.2 of your Contest Description. The top three Essential Skills for your area of competition have been identified on 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/skills/information-technology/it-office-software-applications/>

### 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.

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 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
- Analyse business requirements in order 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-to-understand way
- Use communication and sales 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 including:

- 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.

12 hours

Each day will consist of two sessions utilizing Microsoft Office 2013 or 2016. Each morning session will be 3 hours and each afternoon session will be 3 hours. In each session, competitors may be using any combination of the applications — Word, PowerPoint, Excel and Access **only**.

### 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>8</sup> The ability to access, store and use files

*Essential Skills – <sup>7</sup>Thinking (Problem Solving, Critical), <sup>8</sup>Document Use, <sup>9</sup>Digital*

### 3 CONTEST DESCRIPTION

The Test Project will be in the form of a case study that will represent typical functions that might be asked of an IT professional who is highly competent in the area of Microsoft Office. The scenario will be presented as a project with clearly defined deliverables. These deliverables will be grouped to enable a modular approach whereby discrete tasks are completed within a session. The project will be divided into 4 sessions with 2 sessions each day.

The scenario for this competition will include an extensive simulation of workplace activities related to the Company that is operating in the Province. This could include any type of administrative activity. Competitors will be required to customize and automate elements within the applications. Rush jobs may be included during competition. Rush jobs refer to surprise tasks that will need to be completed within a limited time frame in addition to original project instructions.

Competitors will submit their work at the end of each session. Work files will be provided when needed. Deliverables may be displayed to public.

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

DOCUMENT	DATE OF DISTRIBUTION VIA WEBSITE
No other competition documents will be released prior to the competition	

#### 3.2 Tasks that may be performed during the contest.

The criteria listed in each section above are intended as guidelines only. All criteria may or may not be included.

#### **Database**

Competitors will be expected to use the full functionality of Microsoft Access. Database design skills will be required.

#### **Create and/or Modify a database**

Competitors must know and understand:

- 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:

- 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**

Competitors must know and understand:

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

Competitors must be able to:

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

### **Query a database**

Competitors must know and understand:

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

Competitors must be able to:

- Filter & 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**

Competitors must know and understand:

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

Competitors must be able to:

- Produce and modify reports (simple, grouped, summary and sub reports) following a stated layout and format

Create and use pivot tables and charts

- Set report properties
- Use calculated fields in reports
- Format a report for printing

### **Share data across applications**

Competitors must know and understand:

- 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:

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

### **Customize and automate processes**

Competitors must know and understand:

- 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:

- 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 (eg. financial, engineering, statistical, mathematical, etc.)

### **Construct a spreadsheet**

Competitors must know and understand:

- 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**

Competitors must know and understand:

- How to design and use analysis tools in Excel

Competitors should be able to:

- Perform What If Analysis using Goal Seek / Solver / Scenario Manager
- Analyse Data Using PivotTables and PivotCharts

### **Use Data and Table functions**

Competitors must know and understand:

- How to manage and analyse 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

### **Share data across applications**

Competitors must know and understand:

- 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:

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

### **Printing Spreadsheets**

Competitors must know and understand:

- How to set up worksheets and workbooks for printing

Competitors must be able to:

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



### **Charts and Graphs**

Competitors must know and understand:

- How to present spreadsheet data in various graphical formats

Competitors must be able to:

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

### **Customize and automate processes**

Competitors must know and understand:

- 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:

- 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**

Competitors must know and understand:

- How to enhance visual appeal using graphic objects

Competitors must be able to:

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

### **Use multiple workbooks**

Competitors must know and understand:

- How to work with multiple workbooks

Competitors must be able to:

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

### **Use auditing features**

Competitors must know and understand:

- The importance of controlling data accuracy through auditing

Competitors must be able to:

- Trace cells
- Troubleshoot errors in formulas
- 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**

Competitors must know and understand:

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

Competitors must be able to:

- 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**

Competitors must know and understand:

- How to generate mass-mailing documents

Competitors must be able to:

- 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:

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

Competitors must be able to:

- 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

### **Share data across applications**

Competitors must know and understand:

- 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:

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

### **Customize and automate processes**

Competitors must know and understand:

- 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:

- 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 Test Project.

### **Create a presentation**

Competitors must know and understand:

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

Competitors must be able to:

- Create and modify slides using a variety of layouts and formats
- Use text effects
- Include tables and charts in a presentation
- Import data (text, spreadsheet, charts, etc.)
- Hide/unhide slides

### **Add special effects to presentations**

Competitors must know and understand:

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

Competitors must be able to:

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

### **Add graphical objects to a presentation**

Competitors must know and understand:

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

Competitors must be able to:

- Insert and manipulate Illustrations, for example:
  - Shapes
  - WordArt
  - SmartArt
  - 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**

Competitors must know and understand:

- 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:

- Display objects using timings, animations and transitions
- Create and use macros to automate processes
- Create, modify and use templates
- 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**

Competitors must know and understand:

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

Competitors must be able to:

- 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

## 4 EQUIPMENT, MATERIAL, CLOTHING

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

- USB Key
- Table and chair

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

Competitors are required to bring your 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
- No internet access during competition
- Software:
  - Windows 7 or greater (French and/or English version)
  - Microsoft Office 2013 or 2016 (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. This may require access to CMOS settings.

### 4.3 Required clothing provided by the competitor.

- Competitors should be dressed appropriately

## 5 SAFETY REQUIREMENTS

5.1 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 List of required personal protective equipment (PPE) provided by the competitor.

- No PPE required

## 6 ASSESSMENT

### 6.1 Point breakdown

POINT BREAKDOWN	/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 competitor orientation.

TOPIC/TASK	CONTEST SPECIFIC RULE
Use of technology - mobile phones and music	<ul style="list-style-type: none"> <li>Competitors are not allowed to bring or use personal mobile phones into the skill area</li> <li>Competitors are allowed to listen music using devices e.g. Ipod.</li> <li>Competitors must wear earphones while listening to music</li> </ul>
Use of technology - Internet	<ul style="list-style-type: none"> <li>Competitors are prohibited to use the internet during the competition</li> </ul>

## 8 ADDITIONAL INFORMATION

### 8.1 Consecutive translation

If a French language translator is required on site, 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 Tie (No ties are allowed)

In the event of a tie the competitor with the highest score in the Access will be declared the winner. If a second tie occurs, the competitor with the highest score in the Word project will be declared the winner. If a third tie occurs, the competitor with the highest score in the Excel project will be declared the winner

### 8.3 Competition rules

Please refer to the [competition rules](#) of the Skills Canada National Competition.

## 9 NATIONAL TECHNICAL COMMITTEE MEMBERS

Member Organization	Name
Alberta	Roger Moore
Ontario	Liz Stacey
Newfoundland and Labrador	Cathy Goodwin
Prince Edward Island	Gaylene Nicholson
Saskatchewan	Cindy Lowe
Nova Scotia - Chair	Kurt Lanigan

Contact the Skills/Compétences Canada national secretariat for any questions or concerns: Marilou Leduc (mariloul@skillscanada.com).