Calgary TMC

Technology & Management Consulting

Computer Skills Assessment (CSA)

Essential Skills Assessment

May 2016

Release 1.0

CSA Topics:

Basic Skills

1- Computer Essentials

2- Online Essentials

3- Word Processing - Microsoft Word 2013

4- Spread Sheet - Microsoft Excel 2013

Standard Skills

5- Presentation - Microsoft PowerPoint 2013

6- Using Database - Microsoft Access 2013

7- IT Security

8- Online Collaboration

9- Image Editing

10- Web Editing

11- Project Planning

12- 2D Computer Aided Design *

13- Health Information Systems Usage *

14- ICT in Education *

Advanced Skills

15- Advanced Word Processing - Microsoft Word 2013

16- Advanced Spread Sheet - Microsoft Excel 2013

17- Advanced Database - Microsoft Access 2013

18- Advanced Presentation - Microsoft PowerPoint 2013

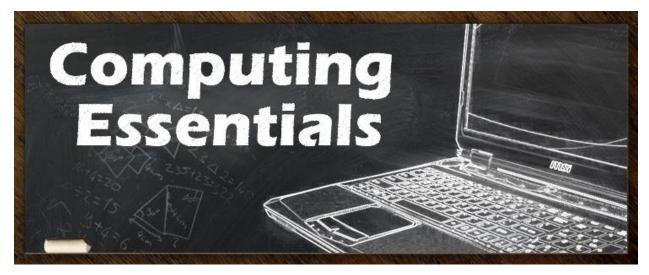* = This Skill is only for related industry

CSA Details:

- ✓ There are two separate Assessment : Standard & Advanced
- ✓ Cost – total questions and time

Assessment	Cost	Total Questions	Time (hours)
Standard I	CAN$ 110.00	165	2:45
Standard II	CAN$ 120.00	180	3
Advanced	CAN$ 40.00	60	1

- ✓ The CSA must be taken all standard or advanced exam at once
- ✓ You may retake them by registering again for each assessment
- ✓ CSA Accounts are active for once
- ✓ Your scores are available from the Assessment Staff maximum 10 work days after you have completed the assessment.
- ✓ Candidate must have valid passport & one copy of main page when entering to test site
- ✓ Candidate must not mark in questionnaire sheet
- ✓ Candidate must complete answer sheet with pencil

Computer Essential

This skill sets out essential concepts and skills relating to the use of devices, file creation and management, networks, and data security

The candidate should be able to:

- ✓ Understand key concepts relating to ICT, computers, devices and software.
- ✓ Start up and shut down a computer
- ✓ Work effectively on the computer desktop using icons, windows
- ✓ Adjust the main operating system settings and use built-in help features
- ✓ Create a simple document and print an output
- ✓ Know about the main concepts of file management and be able to efficiently organize files and folders
- ✓ Understand key storage concepts and use utility software to compress and extract large files
- ✓ Understand network concepts and connection options and be able to connect to a network
- ✓ Understand the importance of protecting data and devices from malware, and the importance of backing up data
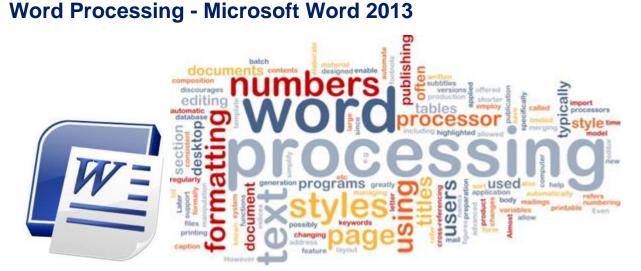- ✓ Recognize considerations relating to green IT, accessibility, and user health

Online Essentials

This skill sets out essential concepts relating to web browsing, effective information search, online communication and e-mail.

The candidate should be able to:

- ✓ Understand web browsing and online security concepts
- ✓ Use the web browser and manage browser settings, bookmarks, and web outputs
- ✓ Search effectively for online information and critically evaluate web content
- ✓ Understand key copyright and data protection issues
- ✓ Understand concepts of online communities, communications and e-mail
- ✓ Send, receive e-mails and manage e-mail settings
- ✓ Organize and search e-mails and use calendars

Word Processing - Microsoft Word 2013

This Skill allows candidates to demonstrate the ability to use a word processing application to accomplish everyday tasks associated with creating, formatting, and finishing small-sized word processing documents, such as letters and other everyday documents.

The candidate should be able to:

- ✓ Work with documents and save them in different file formats

- ✓ Choose built-in options, such as the Help function, to enhance productivity

- ✓ Create and edit small-sized word processing documents that will be ready to share and distribute

- ✓ Apply different formats to documents to enhance them before distribution; recognize good practice in choosing the appropriate formatting options

- ✓ Insert tables, images, and drawn objects into documents

- ✓ Prepare documents for mail merge operations

- ✓ Adjust document page settings

- ✓ Check and correct spelling before finally printing documents

Spread Sheet - Microsoft Excel 2013

This Skill allows candidates to understand the concept of spreadsheets and to demonstrate an ability to use a spreadsheet to produce accurate work outputs.

<u>The candidate should be able to:</u>

- ✓ Work with spreadsheets and save them in different file formats
- ✓ Choose built-in options, such as the Help function, within the application to enhance productivity
- ✓ Enter data into cells; use good practice in creating lists
- ✓ Select, sort and copy, move and delete data
- ✓ Edit rows and columns in a worksheet
- ✓ Copy, move, delete, and appropriately rename worksheets
- ✓ Create mathematical and logical formulas using standard spreadsheet functions; use good practice in formula creation; recognize error values in formulas
- ✓ Format numbers and text content in a spreadsheet
- ✓ Choose, create, and format charts to communicate information meaningfully
- ✓ Adjust spreadsheet page settings
- ✓ Check and correct spreadsheet content before finally printing spreadsheets

Presentation - Microsoft PowerPoint 2013

This skill allows candidates to understand the concept of presentations and to demonstrate competence in using presentation software

<u>The candidate should be able to:</u>

- ✓ Work with presentations and save them in different file formats
- ✓ Choose built-in options, such as the Help function, within the application to enhance productivity
- ✓ Understand different presentation views and when to use them; choose different slide layouts and designs
- ✓ Enter, edit, and format text in presentations
- ✓ Recognize good practice in applying unique titles to slides
- ✓ Choose, create, and format charts to communicate information meaningfully
- ✓ Insert and edit pictures, images, and drawn objects
- ✓ Apply animation and transition effects to presentations
- ✓ Check and correct presentation content before finally printing and giving presentations

Using Database - Microsoft Access 2013

This Skill allows candidates to understand the concept of a database and demonstrate competence in using a database

The candidate should be able to:

- ✓ Understand what a database is and how it is organized and operated
- ✓ Create a simple database and view the database content in various modes
- ✓ Create a table; define and modify fields and their properties; enter and edit data in a table
- ✓ Sort and filter a table or form; create, modify and run queries to retrieve specific information from a database
- ✓ Understand what a form is; create a form to enter, modify, and delete records and data in records
- ✓ Create routine reports and prepare outputs ready for

IT Security

This skill sets out concepts relating to the secure use of ICT in daily life and skills used to maintain a secure network connection, use the Internet safely and securely, and manage data and information appropriately.

The candidate should be able to:

✓ Understand the importance of keeping information and data secure, and identify common data/privacy protection, retention and control principles.

✓ Recognize threats to personal security from identity theft and potential threats to data from using cloud computing.

✓ Be able to use passwords and encryption to secure files and data.

✓ Understand the threat of malware and be able to protect a computer, device or network from malware and address malware attacks.

✓ Recognize common network and wireless security types and be able to use personal firewalls and personal hotspots.

✓ Protect a computer or device from unauthorized access and be able to safely manage and update passwords.

✓ Use appropriate web browser settings and understand how to authenticate websites and browse the web securely.

✓ Understand communication security issues that can arise from using e-mail, social networks, voice over Internet protocol, instant messaging and mobile devices.

✓ Backup and restore data to local and cloud storage locations and delete and dispose of data and devices securely.

Online Collaboration

This skill sets out concepts and skills relating to the setup and use of online collaborative tools, such as storage, productivity applications, calendars, social media, web meetings, learning environments, and mobile technology

The candidate should be able to:

- ✓ Understand the key concepts relating to online collaboration and cloud computing
- ✓ Set up accounts to prepare for online collaboration
- ✓ Use online storage and web-based productivity applications to collaborate
- ✓ Use online and mobile calendars to manage and plan activities
- ✓ Collaborate and interact using social networks, blogs, and wikis
- ✓ Schedule and host online meetings and use online learning environments
- ✓ Understand key mobile technology concepts and use features such as e-mail, applications, and synchronization
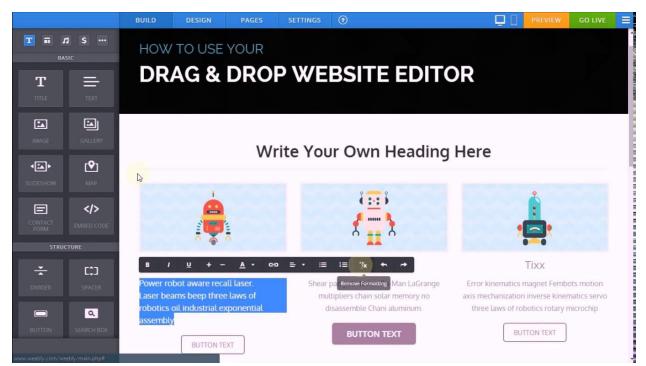
Image Editing

This skill enables the candidate to understand the main concepts underlying digital images and to use an image editing application to enhance images, apply effects, and prepare an image for printing and publishing.

The candidate should be able to:

- ✓ Understand the main concepts of using digital images; understand graphic format options and color concepts

- ✓ Open an existing image; save an image in different formats; set image file options

- ✓ Use built-in options, such as displaying toolbars, palettes, to enhance productivity

- ✓ Capture and save an image; use various selection tools; manipulate images

- ✓ Create and use layers; work with text; use effects and filters; use drawing and painting tools

- ✓ Prepare images for printing or publishing

Web Editing

This skill enables the candidate to understand key web publishing concepts and to create, upload, and maintain a web site.

The candidate should be able to:

- ✓ Understand key web concepts and terms
- ✓ Know about the basic principles of HTML; use common HTML mark-up tags to modify the layout of a web page
- ✓ Use a web authoring application to design and format web pages; format text; work with hyperlinks and tables
- ✓ Recognise and use common web image formats; create forms in a web page
- ✓ Understand and use cascading style sheets
- ✓ Prepare web pages for publishing to a web server

Project Planning - Microsoft Project 2013

This skill enables candidates to use project management software to prepare project plans and monitor projects, including planning and managing time, costs, tasks, and resources.

The candidate should be able to:

- ✓ Understand the key concepts relating to managing projects
- ✓ Use a project management application to create a new project and maintain an existing project
- ✓ Create and schedule tasks; add project constraints and deadlines
- ✓ Assign costs; create and assign resources to tasks
- ✓ View the critical path, monitor progress, and reschedule work
- ✓ Prepare and print outputs, including charts and reports

2D Computer Aided Design

This Skill is suitable for job position related to the architectural, engineering, and construction sectors, who wish to certify their 2D CAD skills to an independent international standard. It is also suited to those who may already work in these sectors in a non-technical capacity and who wish to acquire or certify 2D CAD skills

The candidate should be able to:

- ✓ Use a two-dimensional design application to create and save drawings, import and export drawings
- ✓ Use layers and levels
- ✓ Create objects and elements; use selection tools; manipulate objects and elements
- ✓ Use inquiry commands, for example, to measure distances, angles, areas
- ✓ Set and modify properties; create and modify text and dimensions
- ✓ Use blocks and cells; create, edit, and use objects from a cell library; embed or link to objects using OLE
- ✓ Prepare outputs for printing or plotting

Health Information Systems Usage

This skill is suitable for users of patient data systems, such as doctors, nurses, and healthcare support staff. It defines the skills necessary for staff to operate a Health Information System (HIS) efficiently and securely. It recognizes the importance of educating and empowering the end user at all levels and for all professions. It builds on and complements professional education and practice principles, and generic ICT skills, to cover the increasingly important area where computer systems used in the health sector may challenge both established professional practice and good data management.

The candidate should be able to:

- ✓ Understand the key features of a Health Information System (HIS)
- ✓ Use a HIS safely and efficiently
- ✓ Understand the ethics, rules, and regulations relating to HIS
- ✓ Understand confidentiality, security, and access control when using a HIS.
- ✓ Understand and interpret electronically recorded data

ICT in Education

This skill, currently being piloted, enables candidates to start engaging in the pedagogically effective use of ICT to support and enhance teaching, learning and assessment in the classroom.

The candidate should be able to:

- ✓ Understand the key concepts and benefits of using ICT to support and enhance teaching, learning and assessment in the classroom.
- ✓ Outline considerations for planning an ICT-enhanced lesson.
- ✓ Understand safety, security and well-being considerations when using ICT in education.
- ✓ Outline ICT resources that can be used to support and enhance teaching, learning and assessment.
- ✓ Understand how to source and evaluate ICT resources to support and enhance teaching, learning and assessment.
- ✓ Outline key features of classroom technologies. Use key features of a learning platform.

Advanced Word Processing - Microsoft Word 2013

This skill is a high-level certification program through which candidates can demonstrate their ability to use the advanced features of word processing applications to enhance their work, improve productivity and save time. Completion of this skill will enable candidates to demonstrate professionalism and save time in the creation, production, review, and distribution of documents

<u>The candidate should be able to:</u>

- ✓ Apply advanced text, paragraph, column and table formatting.
- ✓ Convert text to a table and vice versa
- ✓ Work with referencing features like footnotes, endnotes and captions.
- ✓ Create tables of contents, indexes and cross-references
- ✓ Enhance productivity by using fields, forms and templates
- ✓ Apply advanced mail merge techniques and work with automation features like macros
- ✓ Use linking and embedding features to integrate data
- ✓ Collaborate on and review documents. Work with master documents and subdocuments. Apply document security features
- ✓ Work with watermarks, sections, and headers and footers in a document

Advanced Spreadsheet - Microsoft Excel 2013

This skill is a high-level certification program which presents candidates with the opportunity to bring their spreadsheet skills to an expert level. Completion of this skill will enable candidates to master the more advanced functions of spreadsheet applications, enabling them to produce more sophisticated reports, and to perform complex mathematical and statistical calculations, thus saving time and improving productivity in the completion of tasks.

The candidate should be able to:

- ✓ Apply advanced formatting options such as conditional formatting and customized number formatting and handle worksheets

- ✓ Use functions such as those associated with logical, statistical, financial and mathematical operations

- ✓ Create charts and apply advanced chart formatting features

- ✓ Work with tables and lists to analyze, filter and sort data.

- ✓ Create and use scenarios Validate and audit spreadsheet data

- ✓ Enhance productivity by working with named cell ranges, macros and templates

- ✓ Use linking, embedding and importing features to integrate data

- ✓ Collaborate on and review spreadsheets. Apply spreadsheet security features

Advanced Database - Microsoft Access 2013

This skill is a high-level certification program that enables candidates to use the many advanced tools available in database applications to better manage and organize structured information. Successful completion of this skill will enable candidates to maximize database functions, in order to manage and analyze high volumes of data, thus enabling the production of the quantity and quality of information that business today demands.
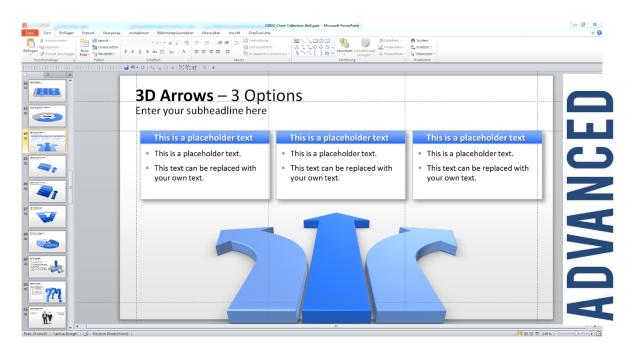
The candidate should be able to:

- ✓ Understand key concepts of database development and usage
- ✓ Create a relational database using advanced table creation features and complex relationships between tables
- ✓ Design and use queries to create a table, update, delete and append data. Refine queries using wildcards, parameters and calculations
- ✓ Use controls and sub forms to enhance forms and improve functionality
- ✓ Create report controls to perform calculations. Create sub reports and enhance report presentation
- ✓ Enhance productivity by working with macros and use linking and importing features to integrate data

Advanced Presentation - Microsoft PowerPoint 2013

This skill is a high-level certification program for candidates who wish to create effective, high-impact presentations using advanced features and who need to be able to prove their skills in this area. The skill covers advanced presentation features that will allow candidates to use the presentation application to its full potential, and to plan and design more effective presentations that have greater impact and that will better engage and involve an audience

The candidate should be able to:

- ✓ Understand target audience and venue considerations in presentation planning
- ✓ Create and modify templates and format slide backgrounds
- ✓ Enhance a presentation using built-in drawing and image tools
- ✓ Apply advanced chart formatting features and create and edit diagrams
- ✓ Insert movies and sound and apply built-in animation features
- ✓ Use linking, embedding, importing and exporting features to integrate data
- ✓ Work with custom slide shows, apply slide show settings, and control a slide show