

DIGITAL FLUENCY FOR THE WORKFORCE

Consultation Report and Curriculum Framework



This report was produced as part of a project funded by the Future Skills Centre (FSC), with financial support from the Government of Canada's Future Skills Program.

FSC is a forward-thinking centre for research and collaboration dedicated to preparing Canadians for employment success. We believe Canadians should feel confident about the skills they have to succeed in a changing workforce. As a pan-Canadian community, we are collaborating to rigorously identify, test, measure, and share innovative approaches to assessing and developing the skills Canadians need to thrive in the days and years ahead. The Future Skills Centre was founded by a consortium whose members are Toronto Metropolitan University, Blueprint ADE, and The Conference Board of Canada

The opinions and interpretations in this publication are those of the author(s) and do not necessarily reflect those of the Future Skills Centre or the Government of Canada.



AGENDA

- **Introductions**
- **Report**
 - Methodology, Findings
 - The Curriculum Framework (draft)
 - Course development process
 - Considerations
- **Next Steps**
 - Action items for online course development



DIGITAL FLUENCY FOR THE WORKFORCE

PROJECT GOAL



To develop a series of **stackable digital fluency micro-credentials** to better equip marginalized individuals to transition to and within the workforce and to provide employers the ability to recruit and retain digitally-fluent workers in a timely and cost-effective manner.



DIGITAL FUENCY CURRICULUM

GUIDING QUESTIONS

- **What does foundational digital fluency look like as a spectrum of skills based on industry input?**
- **How can digital fluency be learned, assessed and demonstrated by a learner?**
- **Is it possible to build foundational digital fluency training that can garner cross-sectoral backing?**

CONSULTATION SESSIONS

GUIDING QUESTIONS

- 1) To determine the most common digital skills articulated by participants from a variety of sectors, and
- 2) To find commonalities across sectors that represented broader essential skills required in entry-level positions in a variety of workplace contexts.



CONSULTATION SESSIONS

INDUSTRY PARTNERS	HCCES CLIENTS	INTERNAL PARTNERS	HUMBER LIBRARY
Sept 17 – Oct 1, 2020	Oct 8, 2020	Oct 15-16, 2020	Oct 16, 2020
7 sessions 1.5-2 hours each	1 session 1.5 hours each	2 sessions 1.5 hours each	1 session 1.5 hours each
30 total participants	13 total participants	22 total participants	11 total participants

SECTOR-SPECIFIC SESSIONS

AGENDA

- 1.** Welcome and introductions
- 2.** Land Acknowledgement and Equity, Diversity & Inclusion Statement
- 3.** Key Concepts
- 4.** Discussion: Questions and Follow-up Prompts
- 5.** Presentation of Draft Competencies – request for examples and feedback
- 6.** Final Thoughts and Debrief
- 7.** Provide link to optional post-session survey link provided



CONSULTATION SESSIONS

DISCUSSION QUESTIONS

**What digital skills
and tools are
common?**

**What soft skills
support digital
skills?**

**What gaps do you
see in employees'
digital skills?**

**How do you
identify “digital
readiness”?**



HCCES PARTICIPANT SESSION

DISCUSSION QUESTIONS

- 1.** Think about when you are job hunting. What digital skills that you see on job postings would you like to develop?
- 2.** In previous or current jobs, what digital tools do you use, and for what purpose?
- 3.** What strategies do you use to develop your own digital fluency?
- 4.** Zoom poll: What is your experience with Zoom? (select one)
- 5.** Zoom poll: Which of the following digital skills are important to you to develop to meet your professional goals? (choose all that apply)
- 6.** Zoom poll: What types of support are needed to help people in this course develop
- 7.** their digital skills? (choose all that apply)



DATA ANALYSIS

RECORDINGS, SURVEYS, NOTES



THEMES: DIGITAL SKILLS

Identified common digital skills across sectors.

e.g., working in the cloud, entering data into spreadsheets, creating reliable file systems



THEMES: SOFT SKILLS

Identified soft skills that support the digital skills.

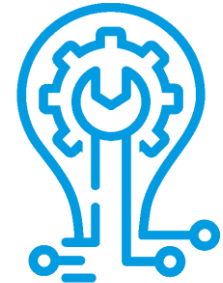
e.g., communication, professionalism, critical analysis



CROSS-SECTORAL DIGITAL TOOLS

Identified digital tools common across sectors.

e.g., Google Suite, Slack, Outlook, MS Office, Zoom, LinkedIn, Instagram



SECTOR-SPECIFIC DIGITAL TOOLS

Identified tools prioritized by industry partners.

e.g., CRMs, POSs, Point-Click-Care, Ceridian Dayforce

COMMON THEMES ACROSS SECTORS

- Digital information management
- Communication across platforms
- Awareness of limits of knowledge/ Seeking help/ Risk-taking
- Security and privacy knowledge
- Personal brand management
- Adaptability to:
 - Multiple platforms: Forms, templates
 - Cloud-based systems: Google Suite, MS Office
 - Sector-specific software: Salesforce CRM
 - Emerging technologies





THE CURRICULUM

SIX CROSS-SECTORAL COMPETENCIES aligned with the Humber Learning Outcomes (HLOs)



**DIGITAL INFORMATION
MANAGEMENT**



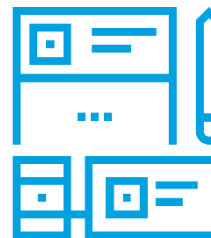
**DATA COLLECTION,
INTERPRETATION, ANALYSIS**



**DIGITAL
COMMUNICATION**



**ETHICS & SECURITY
AWARENESS**



**PROFESSIONALISM IN
DIGITAL SPACES**



**DIGITAL
PROBLEM-SOLVING**

CONSTRUCTIVE ALIGNMENT

COMPETENCY	DEFINITION	HLO
Digital Information Management	input information accurately and manage it effectively using a variety of tools.	Systems Thinking, Critical Thinking, Communication, Strategic Problem-Solving
Digital Data Collection, Analysis & Interpretation	Interact with data through the systematic process of collection, evaluation, interpretation, visualization and communication.	Systems Thinking, Critical Thinking, Communication
Digital Communications	create, share, and publish digital content professionally and safely – adapt to purpose and audience needs.	Systems Thinking, Critical Thinking, Communication, Collaboration
Ethics & Security Awareness	navigate digital environments in ways that promote the health and well-being of self and others while following legal and ethical standards.	Equity, Diversity & Inclusion, Systems Thinking, Critical Thinking, Professionalism
Professionalism in Digital Spaces	create and manage digital identities and share information digitally in a manner appropriate to specific disciplines and workplace contexts.	Equity, Diversity & Inclusion, Systems Thinking, Critical Thinking, Communication, Leadership, Professionalism
Digital Problem Solving	develop one's own digital competence by solving problems effectively in digital spaces.	Equity, Diversity & Inclusion, Systems Thinking, Critical Thinking, Collaboration, Communication, Innovation, Strategic Problem-Solving



THE CURRICULUM

PROGRAM LEVEL OUTCOMES

- 1.** Manage digital information effectively using a variety of appropriate digital tools.
- 2.** Evaluate the credibility and reliability of online sources for research and innovation.
- 3.** Communicate clearly, concisely and professionally for a variety of audiences using appropriate digital tools.
- 4.** Present visual representations of data that are created by self and in collaboration with others.
- 5.** Create and edit accessible and well-formatted documents, surveys and presentations using cloud-based applications.
- 6.** Collaborate with others effectively and professionally using a variety of digital tools.
- 7.** Retrieve, store and share digital information in a secure, ethical and professional manner.
- 8.** Solve problems effectively in digital environments using a variety of strategies such as independent inquiry and peer support.
- 9.** Explore a variety of professional applications that are commonly used in sectors of interest.

MICRO COURSE STRUCTURE

Piloting in January 2021: fully asynchronous online or blended (asynchronous and synchronous) online

Each course is 12-15 hours of foundational skills development. Applicants are pre-assessed into a level, and major assessments include a Digital Portfolio & Action Plan.



**Essential Digital Skills
for the Workplace 1**



**Essential Digital Skills
for the Workplace 2**



**Essential Digital Skills
for the Workplace 3**

SAMPLE COURSE STRUCTURE

ESSENTIAL DIGITAL SKILLS FOR THE WORKPLACE 1

DELIVERY METHOD	LEARNING OUTCOMES	EXIT LEVEL ASSESSMENT
Blended method: 7-8 hours online 6 hours in person, 5 modules	<ol style="list-style-type: none">1. Perform key word searches using more than one strategy on multiple digital platforms.2. Compose and send professional workplace communications for different purposes and audiences.3. Navigate different cloud computing systems effectively for different purposes.	Authentic assessment built into Knowledge Check (summative assessment comprised of formative assessment) and Module Task activity.

SAMPLE TASK

ESSENTIAL DIGITAL SKILLS FOR THE WORKPLACE 2

Present an infographic that shows how you helped someone learn a new digital tool.

COMPETENCIES ADDRESSED:

Digital information management

Digital communication

Digital problem-solving

RELEVANT WORKPLACE SCENARIO:

Present data to colleagues, use cloud-based slides on a shared drive, use Canva app to share ideas.

RECOMMENDED ASSESSMENT APPROACH

SELF-ASSESSMENT

Questionnaire and checklist to guide prospective learners through the assessment process.

ONE-ON-ONE INTERVIEW

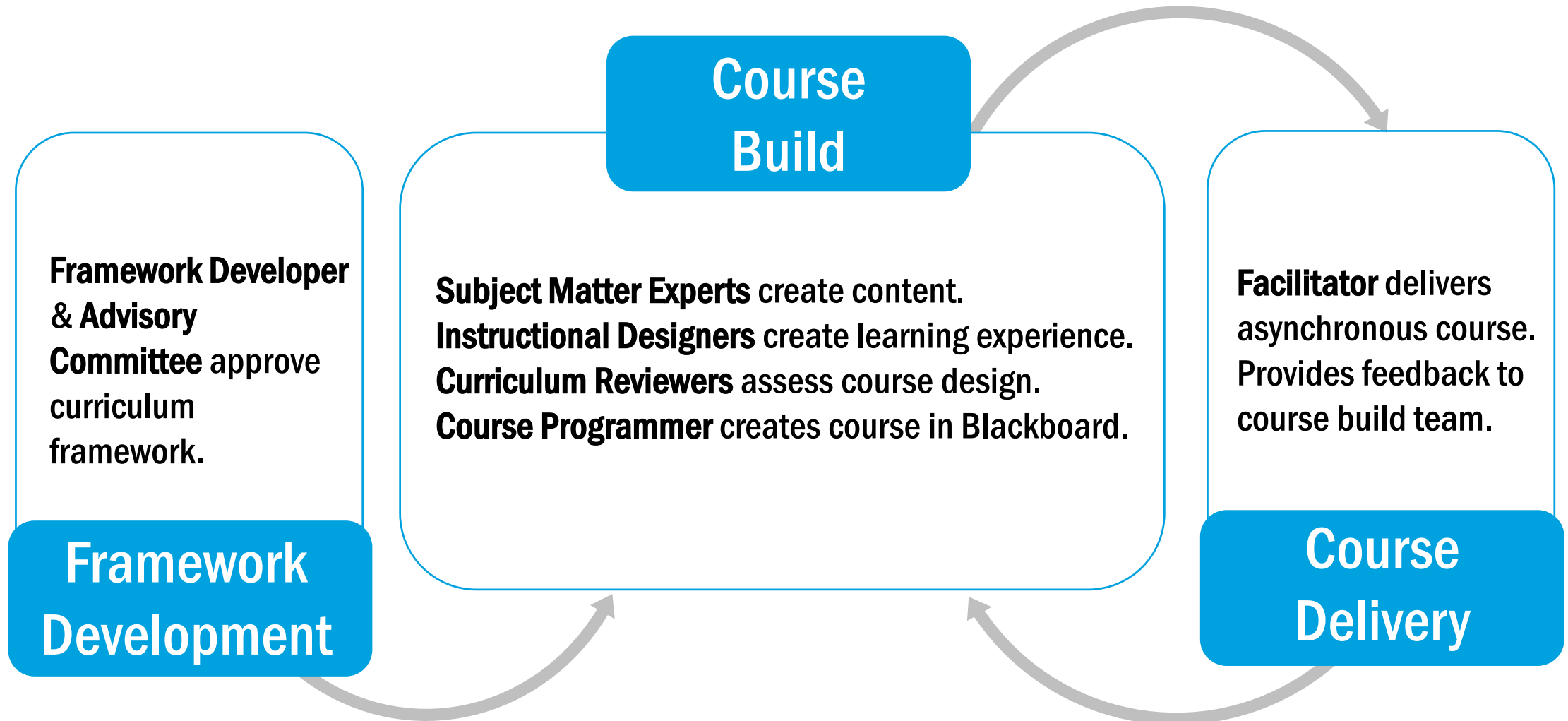
A 15-minute interview with a 3rd party assessor to identify familiarity with digital tools.

ARTIFACT REVIEW

For PLAR purposes; identify the most suitable credential level for the applicant.



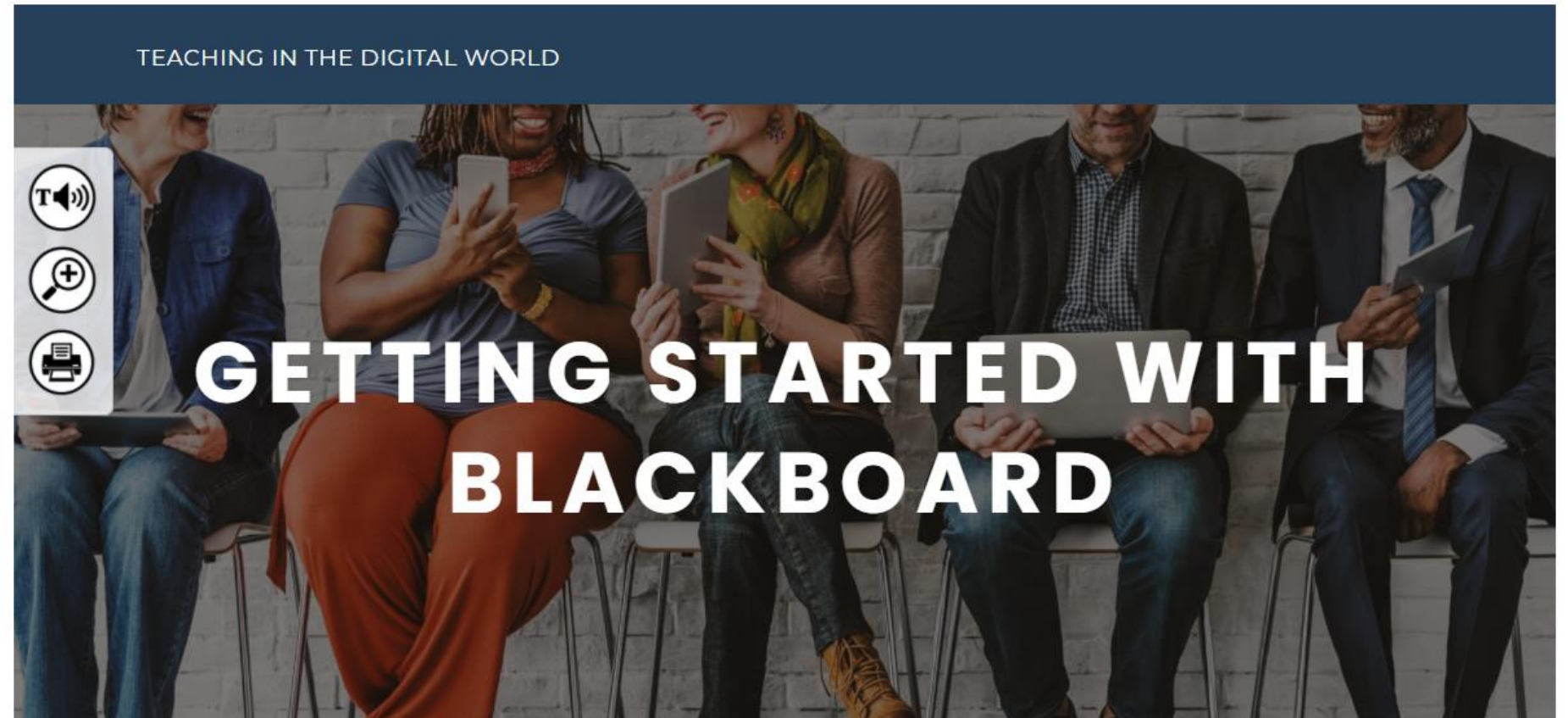
ONLINE COURSE DEVELOPMENT PROCESS



- Introduction and Goals
- Test Your Knowledge
- What is Blackboard Learn?
- Semester Logistics
- How to Access Your Courses
- The Humber Template
- Finding Your Way Around
- Getting Started - Welcome Message
- Critical Path
- Journal
- Discussion Board & Community Building
- Checklist
- References

Introduction and Goals

If this item does not open automatically you can open Introduction and Goals here [A](#)↓



Introduction and Goals

KEY CONSIDERATIONS

- Course development process: team of at least 4, including a course design manager
- Common understanding of “micro”?
- Multi-phased prior learning assessment process: self-assessment, artifacts, 3rd party



KEY CONSIDERATIONS

DESIGN EQUITABLE, INCLUSIVE & ACCESSIBLE LEARNING EXPERIENCES



All courses to be
AODA compliant
by January 2021



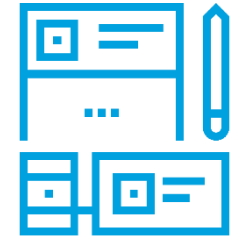
Incorporate
Universal Design
for Learning
principles



Identify student
supports: Humber
Library, public
library, etc.



Use inclusive
lens, address
barriers, be
consistent in
curriculum
design



Embrace and
explore learner
lived experiences

KEY CONSIDERATIONS

BALANCE ASYNCHRONOUS with SYNCHRONOUS SUPPORT

- Provide scaffolding opportunities to build community and connection
- Provide opportunities for learners to “co-construct” tasks with facilitators and share in collaboration opportunities

EMBED LEARNING STRATEGIES THROUGHOUT

- Connect to Humber & community resources
- Lifelong learning philosophy is essential
- Emphasize self-assessment and personal reflection on growth, development & goal-setting





DIGITAL FUENCY CURRICULUM

BACK TO GUIDING QUESTIONS

What does foundational digital fluency look like as a spectrum of skills based on industry input?

Digital fluency is competency driven, with an emphasis on transferable soft skills and mindsets related to critical thinking, risk-taking/ confidence and comfort with ambiguity.

It is a complex series of skills that work together to build adaptability in the workplace.



DIGITAL FUENCY CURRICULUM

BACK TO GUIDING QUESTIONS

How can digital fluency be learned, assessed and demonstrated by a learner?

Being inherently flexible, micro-learning opportunities are suitable for building, assessing and demonstrating digital fluency skills.

Recommendation: Thinking ***even more*** micro may help to address the challenges of separating a broad set of skills into three “levels.”



DIGITAL FUENCY CURRICULUM

BACK TO GUIDING QUESTIONS

Is it possible to build foundational digital fluency training that can garner cross-sectoral backing?

Strong enthusiasm among industry partners indicates that this is possible. However, defining “foundational” consistently across sectors is a challenge.

ESSENTIAL DIGITAL SKILLS FOR THE WORKPLACE 1

Course Delivery Method

- Blended: Online (7-8 hours) and in person (6 hours), 5 modules
- One-on-one ongoing feedback from facilitator

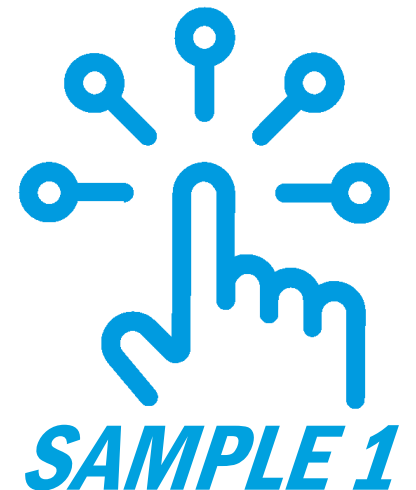
Course Learning Outcomes

1. Develop information management strategies using a variety of techniques using appropriate digital tools.
2. Perform key word searches using more than one strategy on multiple digital platforms.
3. Compose and send professional workplace communications for different purposes and audiences.
4. Store data (i.e., text, images, videos) effectively using a reliable data protection measures (i.e., passwords, file sharing settings).
5. Create a professional profile on at least two digital platforms.
6. Create and share at least one text-based document in a secure and professional manner.
7. Enter numerical data on a spreadsheet accurately.
8. Navigate different cloud computing systems effectively for different purposes.
9. Submit fillable forms on multiple platforms with accuracy.



Exit Level Assessment

Completion of Knowledge Check summative assessment and Module Tasks

- Self-assessment of competencies and learning outcomes
- Reflection tasks on development of digital skills
- Knowledge Check: summative based on formative assessment built into each self-contained module
- Module Tasks: 5 activities of increasing complexity where learners must demonstrate application of skills.



ONLINE COURSE DEVELOPMENT PROCESS

Curriculum Framework Developer	Advisory Committee	Subject Matter Experts (SME)	Instructional Designer (ID)	Curriculum Reviewers	ID and SME	Course Builder/ Programmer	Facilitator
Submits curriculum framework to project lead.	Approve curriculum framework.	Participate in an initial design & development meeting to talk about the project, to map out the course needs, to review the learning outcomes, to review deadlines and to ensure there is commitment on all sides -in terms of hours, roles and responsibilities					Course is delivered asynchronously. Facilitators provide ongoing feedback, support and grading. Facilitator reports common issues to ID and Course Builders for refinement.
		Creates course content, instructions, suggests resources, activities, (i.e., records videos) and assessments, sends to ID.	Instructional Designer (ID) creates modular, asynchronous learning experience: finalizes objectives, sources audiovisual materials and resources, and determines assessments	Instructional Designer (ID) shares ongoing work with curriculum reviewers – subject matter experts (SME) - who assess the validity and engaging quality of this online course. Feedback goes to ID.	Instructional Designer (ID) works with SMEs to revise and refine course design. ID forwards final modules, assignments, etc. to course builder.	Through coding, embeds course content, assignments, tasks and assessments into LMS (Blackboard). Checks for Accessibility.	
		COLLABORATIVE					

KEY CONSIDERATIONS

DESIGN EQUITABLE, INCLUSIVE & ACCESSIBLE LEARNING EXPERIENCES

- All courses in Ontario must be fully [AODA compliant as of January 2021](#).
- Access library resources and tools – *Humber Library* in the short-term, *Toronto Public Library* for lifelong learning.
- Incorporate Universal Design for Learning (UDL) principles – multiple means of engagement, representation and expression.
- Identify the supports available to learners.
- Use an inclusive lens when selecting images, videos, and course content (i.e., cases).
- Address barriers to learning right away through diverse representative models of success stories – highlight multiple examples of individuals who overcame barriers or are working to overcome them.
- Establish consistency in terminology, headings, and titles to guide students through learning modules.
- Embed opportunities for students to build on their lived experiences and share their knowledge with others.

