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Training Plan for Continuing Education and Upskilling in Ayr



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Background and Introduction

The environment scan, conducted in July 2023, summarized Ayr's existing workforce, its immediate and anticipated workforce needs, and the unique barriers to recruiting and retaining workers in the community. The findings were based on a review of the 1) 2021 Ayr population census from Statistics Canada; 2) job postings in Ayr; 3) previous co-op positions in Ayr offered to Conestoga College's students; 4) the 2022 EmployerOne Survey (subset of data from the Township of North Dumfries); and 5) the economic policies of Township of North Dumfries' Official Plan. In addition, data from the environmental scan was used to develop the short-, medium-, and long-term need of the community's workforce.

Short-term community workforce needs are based on job postings that have been posted for over 30 days. Medium-term needs are based on the occupations that employers are planning to hire within the next 12 months and have identified as hard-to-fill occupations. Long-term needs are based on the occupations that employers are not hiring in the next year but have identified them as hard-to-fill (EmployerOne survey data).

Importantly, 30% of the working age population (ages 25 to 65) in Ayr do not hold a post-secondary certificate, diploma, or degree; this number increases to 40% when looking at the Ayr populations greater than 15 years old. Data from the 2022 EmployerOne Survey also indicated that, besides from the lack of applicants, positions were hard-to-fill mainly due to the lack of technical skills, lack of qualifications, and lack of work experiences among the candidates. Given the need for upskilling and post-secondary education in Ayr, two training plans have been developed to address the workforce development needs of Ayr. One training plan identifies relevant training programs available through Conestoga College that will support the educational requirements of the short-, medium, and long-term community workforce needs. The other training plan identifies relevant professional development and upskilling opportunities available through Conestoga College that will allow the existing workforce to support existing skill gaps.

Using the training plan

Training plan 2 (the current training plan) compliments Training Plan 1 by supporting the community's existing workforce through relevant upskilling and professional development opportunities (i.e., continuing education courses and micro-credentials). Continuing education courses and micro-credentials can be taken part-time, allowing employers to build capacity (i.e., specific desired/required skills) of their existing workforce. These opportunities can be completed within 3 to 4 months to address medium-term workforce needs.

For ease of use, this training tool is organized by the nine important skills for success (ESDC, 2023), followed by the desired/required technical skills specified by the employers identified in the initial environmental scan.

Skills for Success

The nine skills for success, rank from highest to lowest in demand based on current employers seeking personnel include Communication (43%), Attention to detail (31%), Writing (25%), Collaboration (21%), Readings (18%), Digital (12%), Adaptability (11%), Numeracy (6%), and Creativity/innovation (2%). Table 1 presents the percentage of employers within each broad occupational section that specified the need for a certain skill in their job posting. The following sections relevant courses and micro-credentials offered by Conestoga College to support those skill requirements.

Table 1. Proportion of employers desiring/requiring a skill for success in their job posting based on each broad occupational category (NOC 1-digit).

Broad Occupational Category (NOC 1-Digit)	Adaptability	Collaboration	Communication	Creativity/ Innovation	Digital	Numeracy	Problem-Solving	Reading	Writing
Business, finance and administration occupations (n=25)	20%	24%	64%	4%	44%	20%	24%	40%	60%
Natural and applied sciences and related occupations (n=5)	40%	80%	80%	20%	20%	20%	60%	0%	20%
Health occupations (n=1)	100%	100%	100%	0%	100%	0%	100%	100%	100%
Occupations in education, law and social, community and government services (n=15)	6%	13%	13%	0%	0%	0%	0%	0%	0%
Sales and service occupations (n=10)	0%	30%	70%	0%	0%	0%	20%	10%	10%
Trades, transport and equipment operators and related occupations (n=56)	4%	9%	29%	0%	5%	4%	14%	13%	20%
Occupations in manufacturing and utilities (n=12)	25%	25%	42%	0%	0%	0%	8%	42%	25%
Total proportion of employers specifying the need for this skill (n=130)	11%	21%	43%	2%	12%	6%	17%	18%	25%

The 2022 EmployerOne survey also asked employers to select the top three competencies in employers and found similar results out of a list of 14 competencies. Although the competency options provided in the EmployerOne survey were not based on the nine skills for success, there were some consistent findings. For example, communication was the most desired skill, and analytical/research – understand data, analyze information (i.e., numeracy skills) was less demanded. However, differences were also observed. For example, 62% of employers (in the Town of North Dumfries) identified that time management/organizational – meet deadlines, prioritizing (deciding what is most important), and multi-tasking was one of the top 3 competencies desired in the employers, whereas only 11% of the job listings identified that adaptability was desired. Although the findings are not directly comparable, it is important to note these consistent and inconsistent findings for future work (Figure 1).

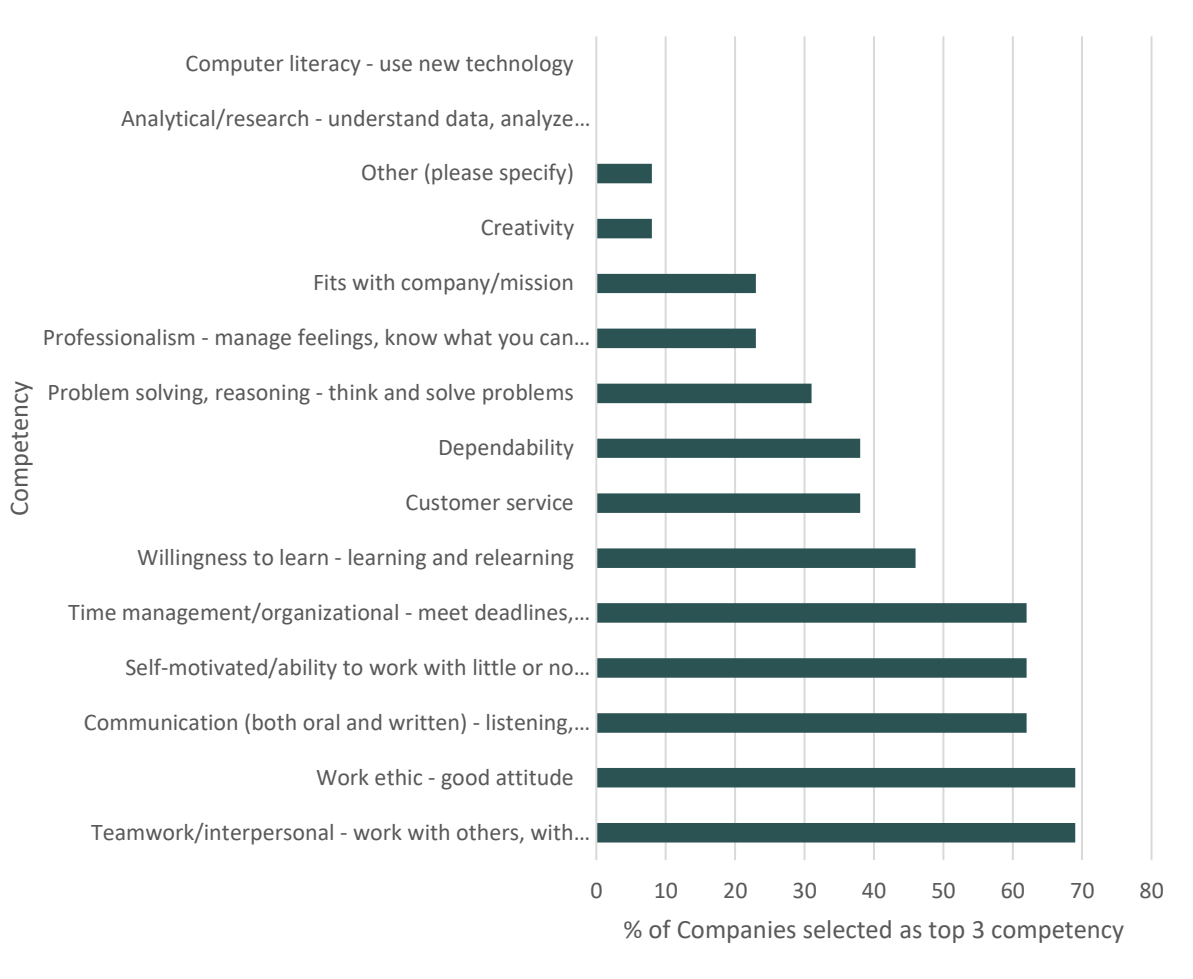


Figure 1. EmployerOne core competencies occurrence percentage.

Communication/ interpersonal skills (n=56)

Communication skills were the most frequently, (e.g., over 43%), desired skill identified from the job postings and the 2022 EmployerOne Survey across all broad occupational categories. As defined by the ESDC research, communication is the ability to receive, understand, consider, and share information and ideas through speaking, Listening, and interactions with others. Notably, EDSC considers writing and reading to be separate skills.

Some of the specific communication skills specified included the ability to 1) Communicate any maintenance work performed or maintenance requirements to the Shift Supervisor; 2) Building, developing, and maintaining working relationships with clients and prospects; 3) Ability to interact positively with supervisors, other staff, and the general public, and participate as an effective team member; 4) communicate route and shipping plans. Conestoga College has several options for communication courses and micro-credentials are in the table below.

Table 2. Continuing education options at Conestoga College aimed to develop workers' communication skills.

Name of Continuing Education	Learning outcomes	Duration
Micro-credential		
Digital Communication for Business	The Digital Communications for Business Micro-Credential provides students with the technical, stylistic, and critical skills that are the basis of effective digital business communication. Students will focus on raising their writing competency to concisely, persuasively and accurately create documents in digital format. Students learn mastery of reports ranging from simple memos to formal reports under the guidance of a professional writer. Using social media tools, students practice and assess their social media writing capacity for corporate purposes, personal branding and communicating appropriately to different target groups.	3 courses 126 hrs/9 cred
French for the Workplace	This micro-credential is aimed at individuals wishing to improve their French language skills and focus on language needs for the workplace. Students will improve their French conversational, pronunciation, and written communication skills at a high intermediate level. Through an integrated skills-based curriculum, students will learn more about the structure of French, unique terminology for a variety of business settings, introductory translation practices, and produce written work suitable for increasingly complex business situations. Additionally, students will improve their confidence in speaking and listening suitable for a variety of business situations, with a focus on French in Canada.	2 courses 84 hrs/ 6 cred
Conflict Management	Managing difficult situations takes skill and practice. Develop practical skills you can apply to a variety of situations to effectively resolve disputes and deal with difficult people with tact and diplomacy. This fully online micro-credential consists of three courses in human relations, dealing with difficult people, and dispute resolution strategies	3 courses 102 hrs/7 cred
Administrative assistant Essentials	This online micro-credential provides students the opportunity to learn the fundamentals of office support, records management, communications, and interpersonal skills.	4 courses 96 hrs/4 cred
Workplace Fundamentals	Develop the essential skills you need to succeed in a 21st century workplace. This online micro-credential provides you with the opportunity to develop or upgrade your computer knowledge, enhance essential career skills, and learn to navigate the Windows 11 operating system. All courses are delivered asynchronously through our partnership with ed2go and must be taken through Conestoga College in order to be eligible.	3 courses 72 hrs/4 cred
Supporting Employee Mental Health and Wellbeing	There is a strong need to gain a better understanding of employees' mental health needs and address them appropriately within the workplace. You will learn key principles for managing mental health disabilities with hands-on recommendations for human resources professionals, managers, and leaders. Topics will include work-from-home, social isolation, return-to-work strategies, and workplace accommodation.	4 courses 68 hrs/4 cred

Name of Continuing Education	Learning outcomes	Duration
Course - Continuing education options at Conestoga College (cont'd)		
<u>Customer Service and Ethics</u>	You will focus on topics pertaining to customer service and the achievement of equity in various social and work settings, including, but not limited to, race, gender, ethnicity and social orientations. This course will enable you to identify possible strategies for empowerment in the workplace.	42 hrs/3 cred
<u>Dispute Resolution</u>	This course surveys the major methods currently in use by organizations for resolving disputes by situating alternative dispute resolution in its historical, social, and legal context. Various ADR techniques will be examined and compared, and students will be provided with an overview of ADR mechanisms, their advantages and disadvantages, and recognize the appropriate situations in which to apply them. Special emphasis is placed on developing mediation skills. Critical issues such as getting parties to the table, ethical issues of the mediation process, power imbalances, the appropriateness of mediation and issues of culture, race and gender are addressed. Technical aspects of the mediation process covered include stages in the mediation process, how to determine the interests of the parties, how to generate options for settlement, and how to get beyond impasses. Negotiation models and the practical techniques necessary to negotiate effectively are also covered.	42 hrs/3 cred
<u>Domestic and Workplace Violence</u>	This course will explore several key elements integral to the development of strategies to respond to the challenges that Violence presents in our working and living communities. As the title of this course suggests, students will be exploring content related to Domestic and Workplace Violence. Because the topic of Violence is immense, the study of Violence must be broken down into small units for students to explore properly, which this course does. Domestic and Workplace settings are often closely related, and each impacts the other regularly in many circumstances. Therefore, including Domestic settings and Workplace settings in the same exploration of Violence lends itself well to an insightful and meaningful experience.	42 hrs/3 cred
<u>English 1</u>	Effective communication is important for building relationships and successful functioning in every part of an organization. Through the different modes of reading, writing, speaking, listening, researching, analyzing, and representing information students develop the skills required for communicating effectively in personal and professional environments. Students will create a portfolio that includes communication tools and activities related to their chosen career path. An emphasis is placed on developing skills required for communicating in digital environments.	42 hrs/3 cred
<u>English 2</u>	This course focuses on developing and enhancing personal presentation and communication skills required to function in the workplace. Students will research and prepare a variety of standard business documents and correspondence used across industries. An emphasis will be placed on researching and compiling a targeted job search portfolio that includes cover letter, resume, and related documents. Utilizing technologies for the purpose of creating a professional presence in digital environment is introduced.	42 hrs/3 cred
<u>Keys to Effective Communication</u>	If you often find yourself at a loss for words or lack confidence in your communication abilities, this course is for you. Each lesson works through the step-by-step process needed to become a great conversationalist. Learn to use communication to build rapport and create environments of trust, warmth, and respect. Become more confident, create a great first impression, get along well with others, and create more and better personal and professional relationships.	24 hrs/1 cred

Writing Skills (n=33)

The ESDC defines writing as “Your ability to share information using written words, symbols, and images. For example, we use this skill to fill out forms and applications, and write emails, reports and social media posts.” Of the assessed job postings, 33 listed writing as a critical skill needed and this was 25% of the total unique job postings.

Specific tasks involving writing included but were not limited to; 1) Typing and proofreading correspondence, forms and other documents; 2) Creates export documents for US shipments, ensuring quality assurance standards are met for accuracy of paperwork and finished goods; 3) Document and log driving/break periods in Kilometers on Daily Trip Report and E-logs in accordance with regulations; and 4) Completes required paperwork utilizing fleet maintenance software program associates with repairing vehicles, documenting part usage and accounting for repair times. Micro-credentials and courses to improve writing are in the table below.

Table 3. Continuing education options at Conestoga College aimed to develop workers' writing.

Name of Continuing Education	Learning outcomes	Duration
Micro-credential		
Accurate Keyboarding	In the fully online Accurate Keyboarding micro-credential, you will use a web-based software program to practice proper keyboarding techniques with a focus on developing speed, technique, posture, and maintaining elevated levels of accuracy. You will develop and apply touch typing skills to produce a variety of business-related correspondence including emails, memos, and business letters.	3 courses 84 hrs/6 cred
Course		
Advanced Keyboarding	Students in this course will master the keyboard with an emphasis on technique, speed, and accuracy. Using a web-based software program, students will practice proper keyboarding techniques. Preparation of common business documents, dictation exercises, and timed keyboarding tests will be used to develop keyboarding skills. Upon successful completion of the course, students will demonstrate the ability to keyboard with 98% accuracy, with a speed goal of 50 wpm.	14 hrs/ 1 cred
Business Communication and Technical Writing	The course is designed to teach students business communications and technical writing skills. Emphasis is placed on analyzing audience, determining purpose, and ordering ideas effectively for various written communications such as letters, memoranda, meeting agenda and minutes, and technical and business reports in the trade environment. As well, all students are expected to participate in group work throughout the semester and are expected to give oral presentations. Students will also learn how to deal with customer service in a construction environment. The course material is focused to most administrative, supervisory and managerial positions.	42 hrs/3 cred
Business Report Writing	In this course, learn how to structure written reports from memos to formal presentations in a way that is precise, clear, and easy to read. Master reports through a series of assignments ranging from simple memos to formal reports. Please note: a firm mastery of English and proficient writing skills are required to be successful in this course.	42 hrs/3 cred
Writerrific: Creativity Training for Writers	In this course, learn a number of invaluable tricks from the published writer's toolbox. Whether you're at work now or hoping to write a novel, non-fiction book, memoir, short stories, or articles, this course liberates the imaginative, inventive bolts of genius that are inside everyone.	21 hrs/1 cred
Effective Writing	In Canadian business environments, it is expected that communication is effective, persuasive, and ethical. This course will teach students how to plan, write, and revise business documents. Students will be introduced to various written business communication formats and the strategies behind their development. This course will help students develop critical thinking and analysis, research, writing, editing and presentation skills.	42 hrs/3 cred

Name of Continuing Education	Learning outcomes	Duration
Course – Writing (cont'd)		
Keyboarding	This is a learn to type course, but also suitable for those wanting to improve their existing skills. Learn how to touch-type—to type text you read from a printed page or a computer screen without looking at your keyboard. By the end of the course, you'll know how to touch-type the alphabetic, numeric, and symbol keys; create, save, and edit word processing documents.	24 hrs/1 cred

Collaboration (n=27)

Given diversity in workplaces today, it is important to be able to work respectfully with people who have different perspectives, professions, experiences, cultures, and backgrounds. ESDC defines collaboration as the ability to contribute and support others to achieve a common goal.

Twenty seven of the 130 job postings were looking for candidates who excelled and enjoyed in working in a collaborative team environment. The ability and willingness to collaborate effectively was demanded most in healthcare, natural and applied sciences, and sales and services.

Some of the skills related to collaboration demanded from employers of Ayr include a 1) coordinating the return of any raw material that does not meet specification requirements, 2) working closely with sales, 3) assisting mechanics and perform other duties as directed. The table below provides continuing education options to help workers develop their collaboration skills.

Table 4. Continuing education options at Conestoga College aimed to develop workers' collaboration skills.

Name of Continuing Education	Learning outcomes	Duration
Micro-credential		
Collaborative and Team-Based Learning in Post-Secondary Education	The ability to work effectively in groups is one of today's most in-demand skills. This online micro-credential helps you to create plans, activities, and supports for group work so that students will get the most out of learning and working together.	5 courses 30 hrs/5 cred
Business-to-Business Sales Skills	The Business-to-Business Sales Skills micro-credential will provide you with the fundamentals of three key areas essential to the modern salesperson. You will learn the sales process in depth – from prospecting to closing, managing key strategic accounts, and will gain practical experience with customer relationship management (CRM) software.	3 courses 126 hrs/9 cred
Course		
Administrative Assistant Fundamentals	Discover and master the essentials of managerial and staff support, information and records management, communications technology, travel and meeting coordination, space planning, and office ergonomics. You'll become an indispensable member of your team by identifying opportunities and implementing solutions to turn your office into a high productivity machine. This course and its follow up (Administrative Assistant Applications) may help you prepare for the internationally-recognized Certified Administrative Professional® (CAP®) exam offered by the International Association of Administrative Professionals® (IAAP®).Note: This course is not affiliated with, nor has it been endorsed by, the International Association of Administrative Professionals® (IAAP®).	24 hrs/1 cred

Name of Continuing Education	Learning outcomes	Duration
Anti-Racism, Discrimination and Equity	Students taking this course will learn the definition of racism and discrimination and will be able to identify the various sources of discrimination and racism resulting from cultural values and physical differences between individuals. By identifying racism and discrimination issues in North American society, students will learn how to analyze the sociological factors that cause bias and prejudice to surface in our society. The main objective of this course is to enhance sensitivity to and intolerance of mistreatment based on racial or ethnic background and appearance, and to consider how to handle these issues as professional individuals in a pluralistic Canadian society. As part of the course, students will communicate with one another through electronic discussion and learn to appreciate through various readings and assignments the many facets of racism and discrimination. This course will be of interest to workers in health services, education, human resources, and business as well as those people who want to enhance their knowledge and sensitivity to issues of racism and discrimination particularly when communicating with people from other cultures or with physical appearances that differ from their own.	42 hrs/3 cred
Course – Collaboration (cont'd)		
Collaborative Framework: Working with Subject Matter Experts	This course will explore the roles and scope of the instructional designer and subject matter expert in the framework of an instructional design project. Students will develop effective conflict resolution strategies as well as interpersonal communication skills. Communication skills to provide feedback and drive course revisions will also be covered.	42 hrs/3 cred
Compassion Fatigue	Compassion Fatigue has been called “the cost of caring” for helping professionals, and its effects can have lasting negative consequences on our health, wellbeing, and work performance. Those helpers who are exposed to others’ trauma and suffering and who work under stressful conditions are especially vulnerable to developing compassion fatigue, vicarious trauma, and moral distress. While there are structural elements to these problems, there are also practices that individuals can put into place to lower their risk, or to recover if they’ve already been affected. This course will teach practical strategies for self-reflection and self-care that will build participants’ resilience.	10 hrs/1 cred
Counselling Gender and Diversity	Students develop knowledge and skills necessary to inform work with diverse individuals and groups with specific attributes and associated needs including sexual orientation, cultural diversity, gender-specific needs, marginalized populations, and older adults. Students critically examine the concept of diversity, stigmatized social identities and the impact on services and supports.	42 hrs/3 cred
Dealing with Difficult People	Understanding people and being able to work with them is one of the major keys to management and life success. In this course, learn to identify and cope with some of the most difficult behaviours you may encounter. Topics include personality styles, establishing rapport, body language, matching and mirroring techniques, and the skills necessary to feel totally connected with individuals.	30 hrs/2 cred
Achieving Success with Difficult People	This course will teach you how to see things from others’ viewpoints based on their needs, values, beliefs, experiences, skills, knowledge, and self-interests. You will learn to approach difficult situations by answering the questions: who? what? where? when? how? and why? By answering these questions, you will understand who your difficult people are, what they’re like, how you react to them, and their response to your actions. You will also practice analyzing your interactions with those you share space with. By observing others closely, you will learn to read their identifying characteristics. Once you can identify which type of person you’re dealing with, you will be able to choose appropriate reactions to their behaviours.	24 hrs/1 cred

Problem-Solving and Analytic (n=22)

Problem solving and analytical skills can be defined as “your ability to identify, analyze, propose solutions, and make decisions. Problem solving helps you to address issues, monitor success, and learn from the experience.” Twenty-two job postings listed problem solving as a major skill that is needed for success within the position specifically within the health, natural and applied sciences and business, finance, and administration occupations.

Of those job postings the specific components related to; 1) Monitoring plant equipment operation and perform necessary running repairs; 2) Managing and solve interpersonal conflicts; and 3) critical thinking and assess long-term impacts; and 4) critical thinking. Courses and micro-credentials that can develop workers problem solving are listed in Table 5 below.

Table 5. Continuing education options at Conestoga College aimed to develop workers’ problem-solving skills.

Name of Continuing Education	Learning outcomes	Duration
Micro-credential		
<u>Inclusive Leadership Practices</u>	Examine the theories, models, and practices of inclusive leadership required in contemporary workplaces. Students will define their own leadership philosophy through examining their personal values, beliefs, and attitudes. They will learn leadership strategies for effectively managing and leading organizational change, as well as focus on leadership practices that can build a positive and inclusive organizational culture. Students will engage in reflective practice in support of building the leadership skills that are necessary to create a diverse, effective, and inclusive environment in 21st century workplaces.	3 courses 126 hrs/9 cred
<u>Creative and Critical Thinking (Leadership Development Series)</u>	Today more than ever, leaders need to be creative and critical thinkers in order to deal with all aspects of organizational, strategic, and societal situations or environments. Learn how to think creatively and critically and apply those skills to both professional and personal situations. For leaders, fine-tuning your creative and critical thinking skills will assist you in strategic planning, decision-making, and problem solving.	30 hrs/2 cred
<u>Learning, Thinking and Problem Solving</u>	After a brief historical overview, this course examines psychology as a science. Psychological research and theory making facilitates our understanding of ourselves as individuals and as members of social groups by describing, explaining, and predicting how we develop and relate in society, how we create ourselves and our world; applied psychology makes its contribution through efforts to enhance individual development and adaptation within society. Students benefit by gaining an introductory knowledge of psychology that can be applied to their daily lives.	42 hrs/3 cred

Reading (n=23)

The ESDC defines reading as “your ability to find, understand, and use information presented through words, symbols, and images.” A total of 23 job postings had tasks requiring reading in their job descriptions. Reading was listed in 18% of job postings, with the highest percentages in health, manufacturing, and business occupations. The tasks listed included 1) Making sure all documentation is completed; 2) Reading and understanding standard operating procedures; 3) Staying up to date with best practices and techniques; 4) Understanding maintenance history.

Table 2. Continuing education options at Conestoga College aimed to develop workers’ reading.

Name of Continuing Education	Learning outcomes	Duration
Course		
Canadian Literature	This course will allow students to read selected Canadian literature, including novels and short stories, and to analyze and discuss various key points of each piece of literature. Students will identify the different types of audiences intended for each literary piece. Some suggested areas of study for each novel will include selected key literary terms as well as discussion of the relevance of setting and plot in relation to Canadian culture and history. This course will focus on both reading literature as well as the use of proper written English. The novels chosen will also be explored in relation to their relevance to Canadian culture. Key literary terms and events will be discussed for each novel, including questions for each literary piece.	42 hrs/3 cred
Read, Set, Read!	In this course, learn how a child becomes literate from the moment of birth. Investigate the many things a child’s growing mind must do to make sense of the written word and create writing. Explore the development of reading and writing from infancy to the early school years. Discover what problems to look for and how to assist a struggling reader.	24 hrs/1 cred
Speed Reading	This course is a complete speed-reading experience. Save yourself hours of time and increase productivity by learning to read faster and with better comprehension. Learn to master the skills and techniques needed for lasting proficiency as a speed-reader.	24 hrs/1 cred

Digital (n=16)

Having digital skills can be defined as “your ability to use digital technology and tools to find, manage, apply, create and share information and content.” This skill was most desired in health, and business, finance, and administration occupations, showing up in 100% and 44% of those postings respectively.

Specifically, job postings were asking for digital skills, including: 1) Using computer word processing, spreadsheet and database software, 2) entering orders via Quickbooks, 3) using a management System, and 4) Strong Knowledge of Microsoft Office (Outlook, Word, Excel, PowerPoint) and records management software applications. Micro-credentials and courses available are listed below.

Table 7. Continuing education options at Conestoga College aimed to develop workers’ digital savviness.

Name of Continuing Education	Learning outcomes	Duration
Micro-credential		
<u>Creating Accessible Digital Document</u>	Expand your professional skill set today with this fully online, 3-course micro-credential. Specifically highlighting the requirements of the Accessibility for Ontarians with Disabilities Act (AODA) and the Integrated Accessibility Standards Regulation (IASR), this micro-credential provides a thorough understanding along with hands-on tools for creating accessible digital documents. Topics include terminology, screen readers, Word, PowerPoint, Excel, Adobe Acrobat (PDF), and World Wide Web Content Accessibility Guidelines (WCAG) 2.0. Upon completion of this micro-credential, you will be well-prepared to evaluate and create accessible digital documents for your organization or business.	3 courses 90 hrs/6 cred
<u>Computer Support Service Essentials</u>	This micro-credential will quickly prepare you to provide computer support services as an entry level service technician. You will gain basic skills in the components of a typical PC and learn about their relationship to the computer’s operating system. You will also learn about computer and operating systems software. These courses will help prepare you to write the Comp TIA certificate exam and can also be stacked and used to satisfy the full Desktop Applications Support certificate.	3 courses 132 hrs/9 cred
<u>Basic Office Software</u>	You will develop technical and organizational skills to enhance your role as an effective office team member in a hybrid, remote, or in-person role. You will further your skills in word processing, presentation software, spreadsheets, videoconferencing, collaboration platforms, e-mail and calendaring, and file storage systems.	3 courses 126 hrs/9 cred
<u>Exploring Digital Technologies</u>	Understanding the technologies that are shaping the way contemporary businesses operate is becoming increasingly important for today’s workforce. This online micro-credential will help you discover a world of possibilities through introductory courses into artificial intelligence (AI), machine learning, blockchain and the cloud. All courses are delivered asynchronously through our partnership with ed2go and must be taken through Conestoga College in order to be eligible.	4 courses 96 hrs/4 cred
<u>Basic Web Design</u>	Whether you are looking to quickly build a website or be able to modify an existing website, this micro-credential will give you the skills needed to do basic web design. This micro-credential is comprised of three courses in web usability, an introduction to HTML, and a computer programming introduction using JavaScript.	3 courses 128 hrs/9 cred
<u>Python Foundations</u>	The Python Foundations Micro-Credential prepares you to become a programmer and problem solver. The versatility of Python is useful for a wide range of purposes from web development and text processing to machine learning and artificial intelligence. Its extensive applicability to data analysis makes Python the program of choice for coding. Using Python to create applications for various industries will prepare you with the skills you need to succeed in software development and applications, as well as provide a foundation for data analysis.	3 courses 126 hrs/9 cred

Name of Continuing Education	Learning outcomes	Duration
Micro-credential – Digital (cont'd)		
Artificial Intelligence and the Assessment of Student Learning	This micro-credential will support faculty in thinking about Artificial Intelligence (AI) and how it will impact the future of assessment in the post-secondary system. Courses will provide ideas and guidance in support of students' use of AI in assessments, as well as how faculty may use AI in assessment generation and design.	3 courses 18 hrs/3 cred
Advanced Office Software	Level up your technical skills in Excel, spreadsheet analysis tools, word processing, PDF software, and document production. Put your knowledge to the test by creating your own mock Virtual Administrative Assistant business, and develop, produce, and present work for a variety of mock clients and businesses	3 courses 126 hrs/9 cred
Artificial Intelligence and its Impact on Teaching	This micro-credential examines the implications and potential of AI in teaching and learning. You will learn the essential terminology and knowledge needed to navigate the evolving landscape of AI, explore diverse ways that AI can be harnessed to optimize teaching and learning, and develop the knowledge and strategies required to foster AI-literacy.	3 courses 18 hrs/3 cred
Adobe Basics and Design	This Adobe Basics and Design micro-credential will provide students with the knowledge and skills needed in the desktop publishing and design industry.	3 courses 114 hrs/8 cred
Course		
Adobe Dreamweaver	In this course, learn to create a professional website without having to write code by hand. Explore how to create HTML-based headings, paragraphs, lists, and tables; insert graphics; add links to text and images; apply cascading styles sheets; customizing the Dreamweaver workspace; and publish a finished site to the Web.	30 hrs/2 cred
Adobe Dreamweaver Advanced	This course will present material for the serious or professional web designer. Concepts explored include HTML5 and CSS3, typography, layouts, navigation, interaction design, managing CSS, working with JavaScript behaviours and CSS interactivity, utilizing advanced time-saving features within Dreamweaver, and developing mobile websites using Dreamweaver and jQuery Mobile.	30 hrs/2 cred
Adobe Illustrator-Digital Illustration and Design I	Using Adobe Illustrator, this course helps students develop skills and knowledge in creating digital files for graphic design projects.	42 hrs/3 cred
Adobe InDesign Basics	In this course, learn to create master pages and single and multiple page documents with single and multiple text columns of text; importing text from various sources and flowing it into linked columns of various shapes and sizes; proper kerning/leading and spacing of text and combining text with imported photos and graphics. Discover how to quickly change font or photo size and how to rearrange elements within a page.	42 hrs/3 cred
Adobe Photoshop 1	In this course, develop your design and image creation skills using Adobe Photoshop. Learn to source images; create, develop, and assess various design solutions; and execute projects in a professional manner.	42 hrs/3 cred
Adobe Photoshop 2	In this course, further develop your image correction and restoration skills using Adobe Photoshop. Learn to restore black and white images using Photoshop tools and gain skills in image correction by using, blurring, adjustment layer, layer masks, and liquifying techniques.	42 hrs/3 cred
Advanced Microsoft Excel 2016	In this course, learn how to maximize Excel's functions and capabilities. Learn to work with databases and advanced techniques for PivotTables, like creating Timelines, calculated fields, and calculated items. Explore how to use Excel's consolidation function to efficiently summarize data from multiple sources, become adept at importing external data using Excel's built-in Power Query tool, and master the art of conditional formatting to highlight duplicate entries and other common worksheet problems.	24 hrs/1 cred
Advanced Microsoft Excel 2019	This course will help you master many features in Microsoft Excel 2019/Office 365 that most users don't know exist. Learn the secret to using formula-based conditional formatting as a creative solution to common issues. You will also learn how to leverage Excel's Power Query tool to import and transform data from almost any data source. Please note: this course must be taken on a PC. It does not support MAC users or Chromebooks.	24 hrs/1 cred

Name of Continuing Education	Learning outcomes	Duration
Course – Digital (cont'd)		
Advanced Office Technology	In this course, students will expand their word processing and document production skills. Students will use advanced formatting techniques and tools to create professional business documents. Students will also gain a basic understanding of integrating other software into their documents. Students will work with word processing and PDF software to create fillable forms and tables. Students will study the features of accessible documents and learn to review business documents for accessibility.	42 hrs/3 cred
Advanced Spreadsheets	This course is designed to build on introductory spreadsheet concepts. Students participate in hands-on training activities that include the creation of: advanced formulas, templates to automate and validate data entry and using wizards and queries to import data into Excel. A variety of analysis tools will also be explored in this course.	42 hrs/3 cred
Advanced Web Pages	In this course, you will learn to write HTML code for page content and CSS code for page styling. You'll learn the latest versions of the languages used to create modern websites. With the help of step-by-step instructions, you'll build interactive websites that collect information from visitors through email sign-up and feedback forms. In addition, you'll learn the latest and most effective techniques for presenting layouts and video that work in any browsing environment. Explore aesthetics, colour scheming, and accessibility in web page design.	24 hrs/1 cred
Android Application Development	This course will familiarize the student with planning, developing, and testing mobile applications for the Android platform using Java. Students will design and build multiple apps throughout the course. Topics include: GUI design, layouts, intents, activities, databases, graphics, and touch events.	36 hrs/3 cred
Data Analysis with Excel	In business today, it is very important to be able to answer the "What if?" and "what does that look like" questions that come up when dealing with all of the data that is collected. Microsoft Excel® has a group of tools that will allow you to answer those questions and many more. Students will learn to organize and visually transform data to better inform stakeholders when making key business decisions.	30 hrs/2 cred
Excel - Core	Learn to use Microsoft Excel to create and format spreadsheets in order to analyse data and make more informed business decisions. Discover how to create, edit, format, and print workbooks; use mathematical formulas and functions; create and format charts and shapes; insert images; cut, copy, and paste data. Please note: this course does not support MAC users.	42 hrs/3 cred
Business Computing Applications	During this course, the student will learn to effectively use the Windows operating system, apply word processing techniques, create basic business presentations, and explore the power of spreadsheets. Students will also learn the skills necessary to operate effectively within the Conestoga College computing environment. An emphasis will be placed on the development of solutions to business problems using commonly available microcomputer tools.	56 hrs/4 cred
Excel Expert	This course will teach advanced topics of Microsoft Excel. Students will learn how to create and manipulate data, work with templates and styles, connect to external data and links, review and protect workbooks, create custom formats and layouts, and create advanced formulas. Please note: this course does not support MAC users.	42 hrs/3 cred
Introduction to Computers	This course will familiarize students with the digital world by exploring the hardware and software of their computer system. Students will learn to use the most common functions of the Windows operating system including File Explorer for file management, utility programs, various web browsers for social media while observing and identifying security and privacy concerns and issues. Students will learn to build properly formatted documents using Microsoft Word and spreadsheets including correctly functioning formulas using Microsoft Excel and create commanding presentations with Microsoft PowerPoint while using the cloud to store and access their files.	42 hrs/3 cred
Introduction to Windows 11	File Explorer can help you manage your files and create basic text documents using WordPad. From managing files and editing photos to working with external drives, you will learn everything you need to know about getting the most from this operating system. Additionally, since security is important, you will also learn how to protect your files and protect and update Windows 11. By the time you finish this course, you will have mastered the basic skills you need to get the most from Windows 11 for both work and play.	24 hrs/2 cred

Name of Continuing Education	Learning outcomes	Duration
Course – Digital (cont'd)		
Web Design for Mobile Applications	<p>This course will familiarize the student with how to design, develop, and test websites that are mobile-friendly. Through theory and hands-on coding exercises students will learn how to leverage CSS3, HTML5, JavaScript, and a variety of open-source frameworks to create responsive, mobile first projects on the web that work equally well on desktops, smartphones, and tablets.</p>	36 hrs/3 cred

Adaptability/Ability to work in a fast-paced environment with changing priorities (n=14)

The ESDC describes adaptability as the “ability to achieve or adjust goals and behaviours when expected or unexpected change occurs, by planning, staying focused, persisting, and overcoming setbacks.” This skill is used when changing work plans to meet new deadlines, learning how to work with new tools and improving skills through feedback.

Some of the skills related to adaptability that’s demanded from employers of Ayr included: 1) Ability to work in a fast pace facility; 2) Performing service calls for emergency breakdowns; 3) Willing to work extended hours and be able to respond to before and after-hours emergency calls-outs in a timely manner; 4) Managing all daily trade functions, including timeliness, quality of workmanship and completion of work.

Many continuing education courses and micro-credentials offered by Conestoga College require students manage and prioritize their time appropriately to complete multiple assignments and tasks while meeting set deadlines. Although Conestoga College may not have continuing education courses or micro-credentials that specifically focus on building adaptability, Conestoga College offers numerous project management courses that may help individuals develop formal time management and organizational skills.

Table 8. Continuing education options at Conestoga College aimed to develop workers’ adaptability skills.

Name of Continuing Education	Learning outcomes	Duration
Micro-credential		
Customer Experience	Gain the tools and strategies to meet customer needs, build enduring relationships, and provide an optimal customer experience through this short three course fully online program. Expertise in customer experience will help you develop a returning customer base and gain new customers from referrals.	3 courses 114 hrs./7 cred.

Numeracy (n=8)

Numeracy was mentioned in in 6% of the job postings, in the following fields: business, finance, and administration (20%), natural and applied sciences (20%), and trades, transport, and equipment operators (4%). Numeracy is defined as “your ability to find, understand, use, and report mathematical information presented through words, numbers, symbols, and graphics.” Most of the job postings were from one company advertising different levels of the same career path with the specific requirement being “Compute mathematical formulas to develop and design detailed specifications for components or machinery, using computer-assisted equipment.” Conestoga courses and micro-credentials are listed in Table 9 below.

Table 9. Continuing education options at Conestoga College aimed to develop workers’ numeracy skills.

Name of Continuing Education	Learning outcomes	Duration
Micro-credential		
Business Analyst Fundamentals	All organizations and businesses must manage and implement change, which is where Business Analysts play a key role in helping define needs and find appropriate solutions. This micro-credential provides the essential skills and knowledge to succeed as a starting Business Analyst. Learn the critical aspects of determining organizational needs and defining processes and supporting technology requirements to provide solutions.	3 courses 126 hrs/9 cred
QuickBooks Essentials	In this micro-credential, students will learn software features, helpful shortcuts, and useful tips. Students will create a company in a QuickBooks environment, including its chart of accounts and financial reports. Students will also learn how to prepare payroll data, process payroll transactions, set up and manage inventory, operate with multicurrency, customized forms, and using advanced reporting. Upon completion, students will be able to organize the accounting of their own small business or work efficiently as a supporting member of an accounting team in small or medium sized company.	3 courses 126 hrs/9 cred
Bookkeeping Essentials	This online micro-credential is offered during evening hours and will provide you with the required skills to perform fundamental bookkeeping practices. You will acquire the necessary knowledge and skills to perform effectively in entry-level bookkeeping positions or manage your own business’ bookkeeping. You will gain an essential understanding of financial accounting and payroll administration, as well as relevant software such as Sage50 and QuickBooks Online.	3 courses 154 hrs/11 cred
Course		
Accounting Basics I	This course examines how accounting information is used by, and meets the needs of, both internal and external users through effective and efficient communication as well as what accounting information is required by a business concern to clearly reflect the operating results of the enterprise over its operating life. Explore generally accepted accounting principles, the interpretation and preparation of financial statements, and how this information is recorded in various business records.	42 hrs/3 cred
Accounting Fundamentals	Learn the basics of double-entry bookkeeping, as well as how to analyze and record financial transactions. Get hands-on experience with handling accounts receivable, accounts payable, payroll procedures, sales taxes, and various common banking activities. We’ll cover all the bases, from writing checks to preparing an income statement and closing out accounts at the end of each fiscal period. Whether you’re a sole proprietor looking to manage your business finances or you simply want to gain an understanding of accounting basics for career advancement or for personal use, this course will give you a solid foundation in financial matters. Please note: this course contains U.S. content.	24 hrs/1 cred
Accounting Basics II	In this course, students will expand their understanding of accounting principles and concepts while covering specific topics including capital assets, corporations’ shareholders’ equity, and bonds payable. Preparation of the Statements of Retained Earnings and Cash flows will also be covered. Students will expand their knowledge of the role financial statement users by studying financial statement analysis.	42 hrs/3 cred
Course – Numeracy (cont’d)		

Name of Continuing Education	Learning outcomes	Duration
Accounting Fundamentals II	This course will build on the knowledge learned in Accounting Fundamentals. In this course, explore such topics as special journals, uncollectible accounts receivable, plant assets, depreciation, notes and interest, accrued revenue and expenses, dividends, retained earnings, and various financial reports for corporations. Please note: this course contains U.S. content.	24 hrs/1 cred
Mathematics for Business	The purpose of the course is to provide the student with a mathematical basis for personal and business financial decisions through four instructional modules. The course stresses business applications using arithmetic, algebra, ratio-proportion and graphing. Applications include payroll, cost-volume-profit analysis and merchandising mathematics. This course stresses logical reasoning and problem-solving skills. A Texas Instrument BAII "Plus" calculator is required for the course.	56 hrs/4 cred

Creativity and innovation (n=2)

Creativity and innovation is defined by the ESDC as “Your ability to imagine, develop, express, encourage, and apply ideas in ways that are novel, unexpected, or challenge existing methods and norms”. One job posting in two different fields that broadly fit this definition was identified and the two fields included: 1) business, finance, and administration, and 2) natural and applied sciences and related occupations. These job postings appeared similar as both referenced “strategic thinking” as a skillset. Courses to develop these skills are listed in Table 10 below.

Table 10. Continuing education options at Conestoga College relevant to developing creativity.

Name of Continuing Education	Learning outcomes	Duration
Course		
Alignment and Assessment Strategies	Design backward and build forward is an important instructional design principle. This course will explore the importance of aligning assessments to course and module outcomes. Activities and exercises which scaffold to the formative or summative assessments are discussed. The course also speaks to how to use quizzes and pre or post assessments effectively by keeping an eye to instructional design principles.	45 hrs/3 cred
Design Elements and Principles	The art of attaining a visual design that is aesthetically pleasing is achieved when the elements and principles of design are followed. Students will learn and apply design elements and fundamental principles to a variety of visual designs to meet specific project objectives.	30 hrs/2 cred
Creative and Critical Thinking (Leadership Development Series)	Today more than ever, leaders need to be creative and critical thinkers in order to deal with all aspects of organizational, strategic, and societal situations or environments. Learn how to think creatively and critically and apply those skills to both professional and personal situations. For leaders, fine-tuning your creative and critical thinking skills will assist you in strategic planning, decision-making, and problem solving.	30 hrs/2 cred

Technical Skills

In addition to the skills for success, we identified 17 unique technical skills employers looked for in candidates to fill their job openings. For each technical skill identified, Table 11 presents the relevant continuing education courses that Conestoga College offers to help attendees develop the certain skills. Similar to continuing education for skills for success, employers can use the table below to identify the relevant continuing education for developing the necessary skill among their existing workforce and new hires. For ease of use, Table 11 is arranged in alphabetical order.

Table 11. Continuing Education Programs at Conestoga College that may help students gain the required skills for jobs that were posted in Ayr.

Name of Continuing Education	Learning outcomes	Duration
Accounting		
Bookkeeping Essentials	Bookkeeping is vital to the success of businesses, organizations, and industry. Enter this dynamic field and take charge of your career prospects by expanding your skill sets! This online micro-credential is offered during evening hours and will provide you with the required skills to perform fundamental bookkeeping practices. You will acquire the necessary knowledge and skills to perform effectively in entry-level bookkeeping positions or manage your own business' bookkeeping. You will gain an essential understanding of financial accounting and payroll administration, as well as relevant software such as Sage50 and QuickBooks Online. If you wish to continue your studies, all three courses can be applied to the Bookkeeping certificate.	3 courses
QuickBooks Essentials	In this micro-credential, students will learn software features, helpful shortcuts, and useful tips. Students will create a company in a QuickBooks environment, including its chart of accounts and financial reports. Students will also learn how to prepare payroll data, process payroll transactions, set up and manage inventory, operate with multicurrency, customized forms, and using advanced reporting. Upon completion, students will be able to organize the accounting of their own small business or work efficiently as a supporting member of an accounting team in small or medium sized company.	3 courses
Accounting and Financial Management	This course introduces business managers to quantitative and qualitative techniques and to communication strategies that enable reporting findings in an engaging and professional manner. Additionally, they are introduced to the essential functions including cost behaviour, budgeting, the interpretation of financial information and the effective communication of operational and financial strategies.	42 hrs/3 cred
Accounting Basics I	This course examines how accounting information is used by, and meets the needs of, both internal and external users through effective and efficient communication as well as what accounting information is required by a business concern to clearly reflect the operating results of the enterprise over its operating life. Explore generally accepted accounting principles, the interpretation and preparation of financial statements, and how this information is recorded in various business records.	42 hrs/3 cred
Accounting Basics II	In this course, students will expand their understanding of accounting principles and concepts while covering specific topics including capital assets, corporations' shareholders' equity, and bonds payable. Preparation of the Statements of Retained Earnings and Cash flows will also be covered. Students will expand their knowledge of the role financial statement users by studying financial statement analysis.	42 hrs/3 cred
Accounting Fundamentals I	Learn the basics of double-entry bookkeeping, as well as how to analyze and record financial transactions. Get hands-on experience with handling accounts receivable, accounts payable, payroll procedures, sales taxes, and various common banking activities. We'll cover all the bases, from writing checks to preparing an income statement and closing out accounts at the end of each fiscal period. Whether you're a sole proprietor looking to manage your business finances or you simply want to gain an understanding of accounting basics for career advancement or for personal use, this course will give you a solid foundation in financial matters. Please note: this course contains U.S. content.	24 hrs/1 cred

Name of Continuing Education	Learning outcomes	Duration
Accounting Fundamentals II	This course will build on the knowledge learned in Accounting Fundamentals. In this course, explore such topics as special journals, uncollectible accounts receivable, plant assets, depreciation, notes and interest, accrued revenue and expenses, dividends, retained earnings, and various financial reports for corporations. Please note: this course contains U.S. content.	24 hrs/1 cred
Accounting (cont'd)		
Foundations of Accounting	This course introduces ASPE, IFRS, accounting terminology, the accounting equation, the double-entry system of bookkeeping, the accrual basis of accounting, financial statements and the ledgers and journals making up a basic accounting system for both sole proprietorship and corporation forms of businesses.	42 hrs/3 cred
Foundations of Accounting II	This course introduces inventory merchandising transactions and valuation, accounting information systems, cash control, payroll accounting, and financial statement analysis.	42 hrs/3 cred
Introduction to Accounting	This course introduces the non-accounting student to the subject of Accounting. It is designed to teach the student an essential life skill. The course focuses on the logic of accounting principles and relates it to the financial well being of the student. The student will learn a basic understanding of accounting that can be used in both their personal life and business career. This course introduces ASPE, IFRS, accounting terminology, the accounting equation, the double-entry system of bookkeeping, the accrual basis of accounting, financial statements and financial analysis and the ledgers and journals making up a basic accounting system for both sole proprietorship and corporation forms of businesses.	42 hrs/3 cred
Introduction to Accounting Principles	This course is designed to provide business students with knowledge about financial and managerial accounting. In particular, methodologies of financial measurement for decision making purposes will be studied. Students will also learn about accounting principles involved to the operation of a business.	56 hrs/4 cred
Analyzing Crop Yields		
No Applicable Courses – Other colleges will have courses in this field (e. g., University of Guelph)		
Basic Truck Maintenance		
No Applicable Courses – While there are no continuing education courses, Conestoga does offer full programs in this field.		
CNC		
CNC Programming	The CNC programming micro-credential is geared towards students and professionals who have some experience with machining and engineering drawing experience. It is geared towards the programming aspect of Computerized Numerical Controls (CNC). Student will learn to write and optimize code for lathes and mills, gain hands-on experience through simulated runs of the programs, and develop an understanding of the complexities of the manufacturing process. This three-course micro-credential prepares participants for entry-level roles in CNC programming.	3 courses
MasterCAM	MasterCAM is an industry-leading post-processing software used to control CNC machines. This micro-credential teaches students to create code for 2- and 3-dimensional tool path controls in 3- and 4-axis machining. Emphasis is placed on industry best practices and standards.	3 courses
CNC Programming - Basic	This course is aimed towards general machinists, machine operators, designers and engineers, production planners, CAD/CAM and other professionals, as well as quality technicians who want to understand and apply the complexities of this modern manufacturing process. The main topics will cover all general principles and requirements of CNC programming, from the basic elements to actual development of simple part programs for common machining operations. To gain hands on experience students will use tool path simulation software.	42 hrs/3 cred
CNC Programming – Intermediate	Recommended: CNC Programming Basic or equivalent industrial experience with CNC machine tool operation and programming. This Intermediate CNC programming course has been developed for students who have a basic knowledge and/or some experience in programming or operating CNC machines. The main subjects covered in this course are fixed cycles in detail, contour programming (linear and circular interpolation), repetitive cuts, cutter radius offset, special calculations and subprogram development. Several concepts introduced in the Basic course will be reinforced, and many new subjects will be introduced for CNC machining centres.	42 hrs/3 cred

Name of Continuing Education	Learning outcomes	Duration
CNC Programming - Advanced	Recommended: CNC Programming Intermediate. Having successfully completed the Basic and Intermediate course levels of CNC Programming, the student would go on to study advanced programming techniques focusing on topics such as thread milling, multi-start threading with introduction to sub-programming and macro programming techniques for both Machining and Turning centres.	42 hrs/3 cred
CPR		
Red Cross Standard First Aid and CPR/AED Level C and BLS	This is a comprehensive Red Cross course which covers injury preventions and care in life-threatening situations including: choking skills, rescue breathing, CPR techniques for adults, children and infants, introduction to autonomic external defibrillators, bag-valve masks, prevention of disease transmission and treatment of severe bleeding. This course also covers Musculo-skeletal and soft tissue injuries, head and spine injuries, sudden medical emergencies and poisoning. Upon successful completion, a certificate from the Canadian Red Cross will be issued.	20 hrs/1 cred
Customer Relationship Management		
Customer Experience	Stand out from the crowd in your service organization by focusing on your customer's experience. Gain the tools and strategies to meet customer needs, build enduring relationships, and provide an optimal customer experience through this short three course fully online program. Expertise in customer experience will help you develop a returning customer base and gain new customers from referrals. Courses in this micro-credential can be applied to the Client Relations certificate program.	3 courses
Building and Maintaining Customer Relationships	In this course, students develop an understanding of customer service and the skills associated with understanding the needs of customers, meeting those needs, and fostering an environment that encourages customers to return.	48 hrs/3 cred
Customer Relationship Management	In this course, students will examine the practices, strategies and technologies that companies use to manage and analyze customer interactions and data throughout the customer lifecycle. Students will learn to use these tools to improve business relationships with customers, assist in customer retention and drive sales growth.	42 hrs/3 cred
Customer Relationship Management and Selling	This course is designed to provide students with the essential skills required to be a sales professional in a Business-to-Business (B2B) environment. The course will explore computer and communication technologies as they apply to business-to-business selling and will provide an introduction to the use of customer relationship management (CRM) and web selling. Students will develop their skills by creating a detailed step-by-step sale simulation of a product or service using a consultative approach and creating a win-win environment for both the prospect and the seller delivered via YouTube.	42 hrs/3 cred
Demand and Customer Relationship Management	Demand Management (DM) and Customer Relationship Management (CRM) complement each other. DM is a business process included in Sales and Operations Planning (S&OP), or Integrated Business Planning (IBP). It involves forecasting, planning and managing the aggregate demand for a company's products and services. On the other hand, CRM focuses on building and maintaining profitable relationships with individual customers. An effective CRM process can assist an organization to increase market share, profit and customer satisfaction and help combat competitive pressure. This course explores DM and CRM as a key strategic processes within all organizations and a vital aspect of any successful supply chain, whether the relationship is business to consumer (B2C) or business to business (B2B). Students will gain experience in demand forecasting, use CRM technology and apply CRM fundamentals within the context of case studies related to multinational companies.	56 hrs/4 cred
Customs Knowledge		
International Business	Globalization is one of the key issues facing businesses. This course will provide the student with a basic understanding of why all countries and companies have a vested interest in ensuring they are ready and able to understand and manage global, cultural, and transnational issues. Managers must be able to ensure that their organizations are able to compete in an increasingly complex global arena. Areas of study include international trade agreements, trade organizations, and their impacts on countries, environment and culture.	42 hrs/3 cred
Data Management		
Data Analyst	This micro-credential is aimed at participants that wish to better gather and interpret the massive amounts of data that companies collect. The learning	3 courses

Name of Continuing Education	Learning outcomes	Duration
	<p>outcomes will provide the skills necessary to collect, clean, identify, and visualize the large amounts of data and interpret its value to help make better business decisions. The courses in this micro-credential will teach the participant how to best collect the needed data, organize and search through the data based on needs, and finally turn the data into visual output that is easily interpreted by stakeholders.</p>	
Data Management (cont'd)		
Analytics and Data Management	<p>In this course, students will engage in analyzing information, data analytics, and data visualization. Student will gain hands-on experience with Microsoft Power BI. In addition, students will explore software services, apps and connectors that work together to create graphical, interactive dashboards and reports that visually share data.</p>	42 hrs/3 cred
Big Data Analytic Tools	<p>Students are introduced to popular Big Data tools such as the Hadoop framework and NoSQL databases. Students learn the basic concepts of MapReduce and Python scripting. Through various exercises, students explore widely used software for Big Data like Hive, Pig, and Spark.</p>	42 hrs/3 cred
Data Analysis and Advanced Functions	<p>During this course the student will learn and apply more advanced features of spreadsheet applications in order to develop comprehensive solutions to business problems; and utilize advanced database functions and business intelligence tools of a spreadsheet to enable an executive to make comprehensive and informed decisions.</p>	42 hrs/3 cred
Data Analysis with Excel	<p>In business today, it is very important to be able to answer the “What if” and “what does that look like” questions that come up when dealing with all of the data that is collected. Microsoft Excel® has a group of tools that will allow you to answer those questions and many more. Students will learn to organize and visually transform data to better inform stakeholders when making key business decisions.</p>	30 hrs/2 cred
Data Analytics and Information Systems	<p>This course provides an introduction to business analytics and data visualization with an emphasis on data-driven decision making. The course will cover the concepts, processes, and methodologies used to manage organizational data and the methodologies to transform high quality data into information within the context of multiple areas of study.</p>	56 hrs/4 cred
Database Design for Information Workers	<p>Examine relational databases and their role in library and information work. Learn to create a database, enter and edit records, search for information, and create simple reports.</p>	21 hrs/2 cred
Database Management	<p>Students will gain experience with a variety of database management software systems that may be used in a business setting. Software features will be explored to create and maintain; tables, queries, forms and reports.</p>	21 hrs/2 cred
Designing, Implementing, & Managing a GIS Database	<p>In this course, examine the fundamental and integrational aspects of designing, managing, and implementing a Geographical Information System (GIS). Apply skills such as Information Technology (IT) expertise, research, procurement, and project management. Examine data providers and data management, requests for proposal, system life cycles, benchmarking, general practices of project management, and various standards for spatial data.</p>	42 hrs/3 cred
Human Resources Data Analytics	<p>This course continues from the Data Analytics and Financial Management I course. The fundamentals in the level one course will be enhanced and further developed. As well, this course focuses on the role of audits in the HR function.</p>	42 hrs/3 cred
Introduction to Metadata and Metadata Applications	<p>In this course, learn to apply metadata schemes and standards to describe digital and electronic web resources.</p>	42 hrs/3 cred
MySQL Databases	<p>Focus is on creation, modification, implementation, and maintenance of MySQL and MSSQL databases, as well as how these databases interface with internet applications and database servers. Please note: this course does not support MAC users.</p>	42 hrs/3 cred
Data Management (cont'd)		

Name of Continuing Education	Learning outcomes	Duration
Relational Database Management Systems	Explore building data models, normalization, and querying a database to benefit GIS. Work with spatial data that is stored in a relational database management system and build on storage techniques using relational databases (non-spatial) and spatially enabled databases (geodatabases). Learn to navigate security, administration, and the beginnings of enterprise driven data management.	24 hrs/3 cred
Spatial Database Management and Integration	Expand on skills learned from Introduction to Relational Database Management Systems (RDBMS) to understand large scale enterprise integration of spatially enabled databases to secure administer, and set rules for data that has a spatial component. Use spatial measurements, functions, and indexes to process points, lines, and polygons. Develop and integrate a Spatial Database Management System (SDBMS) and deploy the database for multiple user access and editing. The course will culminate in students developing an enterprise GIS data model and make use of efficient data processing strategies.	42 hrs/3 cred
SQL for Data Analysis	In data analysis, SQL (Structured Query Language) is one of the most valuable tools used to gathering, organize, and present data as valuable information to the end-user. Students will work with relational databases to write simple and complex SQL statements to pull the needed data to generate valuable output needed for decision-making.	30 hrs/2 cred
Food Preparation		
Food Safety Training Certification	This two-day online course provides students with the information, training and the exam required to become a certified Food Handler. Students must attend both days to be eligible to write the exam. Those who achieve a minimum of 70% will receive a Food Handlers' wallet card through either the Region of Waterloo Public Health or Wellington-Dufferin-Guelph Public Health. The card is valid for 5 years.	8 hrs/1 cred
Food Processing Basics	This course will give students an introduction to the Food and Beverage Processing Industry, and cover principles of food science and food composition and basic processing methods. Students will be introduced to food processing equipment.	14 hrs/1 cred
Food Processing Operations	This hands-on course takes place entirely in the Pilot Plant and involves hands-on operation of a complete product manufacturing line. Students learn how to set up, operate and clean full size food processing equipment in a real-life setting, while manufacturing a finished product to specific parameters. Aspects of line efficiency and team organization are taught and evaluated. The students assume various roles as part of manufacturing teams, enhancing their leadership and problem-solving capabilities.	54 hrs/4 cred
Food Processing and Product Development	This hands-on course enhances the learner's knowledge of food manufacturing processes from the perspective of product development. Students will learn the steps involved in product creation and experiment with ingredients to build a specific product to target parameters. The products developed by the students in this course are then scaled-up to manufacturing level in the Pilot Plant.	15 hrs/1 cred
Inventory		
Sterile Storage, Inventory Control and Management of Resources	This course introduces students to sterile storage, inventory control, distribution systems including the case care system, portering, and stock rotation. NOTE: Final exam must be proctored.	35 hrs/2 cred
Marketing		

Name of Continuing Education	Learning outcomes	Duration
Business-to-Business Sales Skills	The Business-to-Business Sales Skills micro-credential will provide you with the fundamentals of three key areas essential to the modern salesperson. You will learn the sales process in depth – from prospecting to closing, managing key strategic accounts, and will gain practical experience with customer relationship management (CRM) software. Enter one of Canada's top 7 most in-demand, future-proof jobs in the sales profession! If you wish to continue your studies, all three courses can be applied to Conestoga's Business Development & Sales graduate certificate.	3 courses
Marketing (cont'd)		
Customer Experience	Stand out from the crowd in your service organization by focusing on your customer's experience. Gain the tools and strategies to meet customer needs, build enduring relationships, and provide an optimal customer experience through this short three course fully online program. Expertise in customer experience will help you develop a returning customer base and gain new customers from referrals. Courses in this micro-credential can be applied to the Client Relations certificate program.	3 courses
Digital Marketing	Get your company or event noticed by developing your internet marketing skills. Digital marketing is ubiquitous in today's successful business strategies. This micro-credential will guide you through formulating an integrated marketing strategy and using a variety of web-based and digital marketing approaches. You will also learn how to transition traditional marketing principles for the internet. Courses in this micro-credentials can be applied to the Marketing Fundamentals Ontario College certificate program.	3 courses
Sales Technology Skills	Sales is no longer a "soft skill-only" type of career. The best salespeople are proficient in technical applications like customer relationship management (CRM) software, Microsoft Excel, Forecasting and other sales enablement technologies. Complete this fully online micro-credential and learn the current technical skills required to join one of Canada's top 7 most in-demand, future-proof jobs in the sales profession. If you wish to continue your studies, both courses can be applied to the Business Development & Sales graduate certificate.	2 courses
Sales/Marketing	Advance your career by developing your marketing and sales skills! In a competitive business market, companies are looking for individuals that can drive growth and forge strong customer connections. You will learn about sales techniques, customer relationship management and marketing approaches including social media marketing. Courses in this micro-credential can be applied to the Marketing Fundamentals Ontario College certificate program.	3 courses
Social Media Essentials for Business	In this introductory micro-credential, you will gain a solid understanding of the commonly used social media platforms as well as a foundational knowledge of today's digital marketing space. Through real-world business examples, you will evaluate and assess market needs and learn how to effectively create measurable objectives. You will gain comprehensive knowledge on how to best leverage relevant social media platforms and utilize practical tools to create marketing plans that will meet business objectives. These courses are taught at the graduate certificate level. To be successful in this micro-credential it is strongly recommended you already hold a two- or three-year college diploma or university degree from an accredited college or university OR have significant relevant work experience in the area of marketing communications.	2 courses
Business and Marketing Writing	Using clear explanations, real-life examples, and an animated style, the course solidifies the relationship between business, marketing principles, and written communications. Learn how business and marketing objectives affect writing choices. You'll get practical writing instruction in grammar, clarity, structure and more. Explore issues unique to this discipline, such as buzzwords, working with a team, and marketing ethics. This course will help you understand the power of writing and use it to present a solid, cohesive message to your target audience.	24 hrs/1 cred
Business-to-Business Marketing	In this course, students will focus on applying the core principles of marketing to the business-to-business environment. This includes the marketing of products to companies for use in the production of other goods, for use in general business	42 hrs/3 cred

Name of Continuing Education	Learning outcomes	Duration
	operations or for resale to other consumers. Students will learn how B2B differs from B2C and how to successfully market to this demanding audience.	
Channel and Retail Marketing	This course focuses on the application of channel and retail marketing strategies to successfully develop and optimize organizational distribution systems. The student will use the key principles of channel design and implementation, end-user analysis, and retail merchandising to create channel and retail distribution strategies to enhance business marketing initiatives.	42 hrs/3 cred
Digital Marketing	This course introduces students to digital marketing approaches through social media, website content development, and automation. Learn to plan, create, and execute a digital strategy while leveraging their own design capabilities, organic SEO approaches, and appropriate online platforms, along with the tools, insights, and outreach they offer	42 hrs/3 cred
Marketing (cont'd)		
Digital Marketing Channels	Digital Marketing has allowed today's marketing professionals to electronically market to customers in cost effective and personalized fashion. This course provides an overview of what tools Digital Marketers today are using and what results they are seeing with their online initiatives. Students examine various conversion points that brands need consumers to make and discuss various digital tools that can aid in those conversions.	42 hrs/3 cred
Integrated Marketing Communications I	This course will introduce key marketing concepts related to the promotions mix in an IMC (Integrated Marketing Communications) framework. Students will be introduced to the foundation of IMC and communication concepts specifically as they relate to influencing consumer behaviour. This course focuses on advertising as part of the promotional mix and explores creative approaches and media alternatives, including the internet and social media options, needed to prepare and justify different marketing communication approaches to create brand interest and ultimately brand loyalty. The advantages, pricing, and measurements of different types of media will also be explored.	56 hrs/4 cred
Integrated Marketing Communications II	In this course, students will build upon and expand their knowledge in the areas of sales promotion, public relations, direct marketing, internet, and interactive media. In addition, students will develop a fully integrated marketing communication solution for a modern business problem.	42 hrs/3 cred
Library Programming, Marketing, and Advocacy	In this course, examine vital client service skills including program planning, outreach, public relations, marketing, and partnerships.	42 hrs/3 cred
Marketing a Trades Business	This course provides an overview of marketing theory before engaging students directly in practical exercises on how to improve a trades business through proven marketing strategy. Learn how service marketing in a trades business differs from traditional product marketing, and the enormous impact that the individual's personal brand has on the company. The importance of networking and referrals will be emphasized. Students will also consider various messaging and media options that resonate best with trades customers.	42 hrs/3 cred
Marketing and Communications for Office Professionals	This course will introduce students to marketing and business communication methods frequently used by business professionals. Topics will include effective written communication, integrated marketing communication principles and strategies, customer service skills, communication via a variety of media including internet and social media, and the production of professional development documents. Students will explore concepts, techniques, and models in marketing and business communication using real world examples.	42 hrs/3 cred
Marketing for Supply Chain Management	Throughout this course, students will learn the basics of marketing beginning with an examination of what constitutes marketing and how new marketing opportunities are identified. Students investigate key concepts related to supply chain management including the importance of the cross-functional relationship between marketing and supply chain to meet customer needs. Students learn how to segment markets, develop positioning strategies, and prepare basic marketing plans involving product or service issues, pricing, distribution, and communications strategies. Environmental analysis is stressed throughout the course, as is the role of technology and strategic planning as they relate to supply chain management.	42 hrs/3 cred

Name of Continuing Education	Learning outcomes	Duration
Marketing I	In this course, emphasis is placed on the formulation of integrated marketing strategies that play a role in achieving organizational objectives. Marketing process and marketing environments; marketing planning and information collection processes; buyer behaviour and targeting strategies; and marketing mix will be examined.	45 hrs/3 cred
Marketing II	In this course, emphasis is placed on the formulation of integrated marketing strategies that play a role in achieving organizational objectives. Price strategy and management; distribution management; marketing communications; and emerging directions in marketing are examined.	45 hrs/3 cred
Marketing in a Digital World	In this introductory course, learners explore both the foundations of traditional marketing as well as the fundamentals of the Digital Marketing Space. Students review the concepts of market segmentation, gain knowledge of the media available to marketers today, study consumer behaviour and analyze campaigns in market that are working well.	42 hrs/3 cred
Marketing (cont'd)		
Marketing Law and Ethics	Advertising law in Canada is governed by federal and provincial laws as well as self-regulatory codes, policies, and bodies. Marketers who advertise their products and services in Canada need to understand this complex legal and regulatory environment and its impact on their marketing and advertising practices in all media. This course will familiarize you with the shifting landscape, rules, laws, and risks facing organizations in their communications with the consumer.	42 hrs/3 cred
Marketing Presentation Skills	This course applies principles of effective oral presentations to a marketing setting. Students will be enhancing their skills in the planning, preparing, and delivery of effective marketing presentations to a variety of audiences using a variety of media.	42 hrs/3 cred
Marketing Research Techniques	This course is designed to use a hands-on orientation in identifying and evaluating business marketing solutions through the examination of several research techniques and applications. The student will use the key principles of problem statement creation, experimental research, and the questionnaire design process to develop actionable research solutions to help solve modern marketing problems.	42 hrs/3 cred
Marketing Your Business on the Internet	In this course, discover proven methods that will help you establish an internet presence and build an online brand identity. Learn how search engine optimization (SEO) works and how to track your site's performance using web analytics. Explore how to use online advertising, email marketing, and social media (including blogs) to drive business to your website.	24 hrs/1 cred
Marketing Your Nonprofit	This course will show you how to use powerful marketing techniques to compete more effectively for customers, donors, members, and volunteers. Learn how to persuade the media to communicate your organization's message and further its ideals and goals. Discover how to improve your market share by learning to evaluate and implement effective promotions, advertising campaigns, and communication techniques.	24 hrs/1 cred
Online Marketing	Websites are a key hub in any online strategy. In this course, you will design a website using industry standard software and utilize Search Engine Optimization (SEO) to improve your ability to reach customers effectively. You will learn design practices to ensure your website is driving towards your business's goals and objectives. You will also learn how to track interactions with customers using buzz monitoring tools such as Google Analytics.	42 hrs/3 cred
Sales and Marketing (Retirement Communities)	This course introduces the student to consumer-based services marketing and sales as applied to the Long-Term Care and Retirement Communities industry. Students will define marketing and demonstrate an understanding of consumer behaviour, market segmentation, the marketing mix, application to the marketing plan, and the principles of selling.	42 hrs/3 cred
Small Business Marketing on a Shoestring	In this course, learn how to use the same marketing tricks that big companies employ, without making a big dent in your wallet. Master cost-effective strategies, including strategic partnerships, local marketing, search engine optimization, social networking, email marketing, lead generation, and niche marketing. Upon course completion, you'll have a personalized plan of action for increasing your sales on a shoestring budget.	24 hrs/1 cred

Name of Continuing Education	Learning outcomes	Duration
Social Media Marketing	In this course you will be provided with a fundamental understanding of many of the different social media channels including the use of mobile apps and games for social media marketing. Once an understanding of the social media channels is established you will learn how to leverage the channels to engage audiences, and integrate with traditional media, in order to achieve marketing objectives.	45 hrs/3 cred
Millwright		
Millwright Apprenticeship Examination Preparation Course	This 30-hour course is designed to assist the apprentices with their preparation to write the Certificate of Qualification exam for the Industrial Mechanic Millwright trade. It will consist of a review of the materials taught during the three levels of in-school training. Common areas of difficulty will be ascertained, and additional in-depth review of these areas will be provided. This program is sponsored totally by the MTCU and has no grade assigned.	30 hrs/0 cred
Project Management		
Agile Project Management	This course will prepare you to apply Agile concepts to manage projects. You will explore Agile values and principles along with how Lean has influenced Agile. Learn how to perform key agile functions such as user story creation, estimation, backlog and sprint planning, sprint execution and scrum, as well as the use of information radiators to monitor sprint progress. Practical case scenarios will be utilized to teach the effective use of Jira software to manage many Agile functions. This course will be of interest to students who would like to pursue a career as a Scrum Master or become more familiar with Agile.	42 hrs/3 cred
Fundamentals of Project Management - Waterfall and Agile	This introductory course is tailored to meet the needs of students who are new to project management, or who have not had formal project management training. Students will be introduced to the basic concepts of both the traditional Waterfall (plan driven) Project Management framework following Dave Barrett's Understanding Project Management - A Practical Guide, as well as the Agile Project Management (change driven) frameworks following PMI's® Agile Project Guide®. Students will be able to understand the benefits of both frameworks and compare the two, learning the practical application of each. After the successful completion of this course, students will be prepared to be introduced to more advanced concepts of project management for both Waterfall as well as Agile Project Management.	42 hrs/3 cred
High Speed Project Management	The smart project manager must rapidly retool their skill set. This on-line course offers a breakthrough model for dealing with the realities of managing projects at supersonic speeds. Learn to meet and win the challenges of truncated timelines, short-staffed project teams, skimpy budgets and crippling risks.	24 hrs/1 cred
Introduction to Project Management	This course provides the practical knowledge to prepare for starting and completing a project successfully. It will cover the components and tasks related to complex projects that often involve multiple functional teams and departments. You will explore how the knowledge areas of the Project Management Body of Knowledge (PMBOK® Guide) are applied during each phase of a project's life cycle as well as the processes related to successful project management. An overview of status reporting and the use of MS Project will be covered. This knowledge will help establish priorities and effectively manage your projects. It will be of particular interest to those students who have a long-term goal of attaining the Project Management Professional (PMP)® designation certified by the Project Management Institute.	42 hrs/3 cred
Leadership in Project Management	This course addresses essential leadership skills such as: human resource management, communication management and leadership styles and skills in project management. Students will learn skills and techniques of organizational planning, staff acquisition, team development, team motivation and evaluation, conflict resolution, negotiations, effective communication, and personal productivity skills.	42 hrs/3 cred

Name of Continuing Education	Learning outcomes	Duration
Major Project in Construction Project Management	This course is designed as a capstone project to enable students to apply and synthesize the material learned in other courses. Working in a team, students will select a project, submit a project proposal, and prepare a detailed project report and present their finding in a professional jury setting to external and internal examiners. In this course students assume consultant's and contractor's roles. In consultant's role students prepare detailed market, technical and financial analysis, site selection and site feasibility study, project design, preliminary cost estimate, value engineering and life cycle costing, bid document, bid invitation, and simulated bid award. In the contractor's role students prepare detailed quantity takeoff, cost estimate, site layout, project schedule, resource plan, risk plan, quality plan, procurement plan, construction health and safety plan, communication plan, stakeholder plan. The project type will engage all the lessons learned during study, including co-op, therefore, Enrollment in this course is limited to students who are in their final semester of the program.	56 hrs/4 cred
Project Management Fundamentals	This course, taught by an experienced Project Management Professional, will help you master the essentials of project management. Learn about project politics and ethics, project measurements, and project closure. By the end of the course, you'll be able to develop all sections of a project plan, be comfortable with the project management body of knowledge, and have developed a variety of powerful techniques to generate project ideas.	24 hrs/1 cred
Project Management (cont'd)		
Project Management Fundamentals II	Are you a part-time or accidental project manager? Part-time project managers have projects assigned to them in addition to their daily responsibilities. Accidental project managers find themselves leading projects without formal training in the discipline. Some people choose project management as a career, and many others find project management just another part of your area of responsibilities. For you, project management is a skill set, not a career. If you've been assigned projects and need a quick jump start to get going, then this is the course for you. You'll learn the 10 essential skills you need to survive and thrive. Topics include understanding the business need and the related project outcomes, setting project boundaries so you know what's included and what's not, getting to know your project stakeholders and their needs so you can set and meet their expectations, and how to plan projects and create a schedule. We'll also talk about how to manage projects once the project's execution phase begins. This includes understanding reporting project progress and how to anticipate and handle problems as they arise. It's not enough to just manage a project, you also have to control it so things don't get out of hand. Eventually, the project will come to an end, so you'll need to know what project closing looks like. You'll want to turn the project over to your customer so you can close down the project and move on to your next big adventure. Throughout the course, you'll find examples of real projects and how each of these essential skills applies in the real world. Project management skills are essential life skills with many practical applications and all industries. Project management and leadership are consistently the top two skill sets current and future employers look for, so this is also essential for your professional development.	24 hrs/1 cred
Project Management	This course is intend to guide a student through the proven systematic system of project management. This will aid the student to understand, analyze, and manage the complexity of steel structure project and demonstrate this knowledge in the real world of the steel construction industry projects. Students will be able to recognize, illustrate and employ the 10 knowledge areas and its associated 5 process group of project management system using the PMBOK as a guide.	42 hrs/3 cred
Project Management - Applied Project	This course will include the first phase of an extensive Project Management initiative. A comprehensive business case outlining a business focused project to be implemented will be developed and evaluated.	42 hrs/3 cred
Project Management - Capstone	This course prepares the learner to write the (PMI)® Certified associate in project management (CAPM)® certification exam. This exam is a valuable entry-level certification for project practitioners. Designed for those with little or no project experience, the CAPM® demonstrates your understanding of the fundamental knowledge, terminology and processes of effective project management.	42 hrs/3 cred

Name of Continuing Education	Learning outcomes	Duration
Project Management Applications	In this course, taught by an experienced Project Management Professional, learn about the powerful tools and techniques that experienced project management professionals rely on daily. Increase the probability of project success by exploring Earned Value Performance Measurement, Gantt Charts, Network Scheduling, Work Breakdown Structure, and Cost-Volume Analysis. Become proficient at recruiting project team members and empowering them to succeed. Learn the stages of team development and gain skills in developing and motivating team leaders. Discover how to understand and relate to an organizational culture and the differing characteristics of its work groups.	24 hrs/1 cred
Project Management for Course Design	Instructional design involves managing not only the design of curriculum in order to meet learning outcomes but also managing time requirements and other tangible and intangible resources. This course explores the important concepts in project management specifically for educational design and development. Time management and cost control, conducting a proper needs analysis from an institutional level as well as strategies for determining scope will be explored.	45 hrs/3 cred
Project Management (cont'd)		
Project Management Professional Preparation	This comprehensive online course will prepare you for the PMI's® prestigious Project Management Professional (PMP)® certification exam and what to expect after you complete it. You will learn about the eight project performance domains and what is new in the latest edition of the Project Management Body of Knowledge (PMBOK®). Expand your knowledge of important industry-related methodologies, including predictive and agile project management. Raise your project management IQ by exploring project management tools and techniques. Throughout the course, use proven learning strategies to help absorb key terminology, concepts, and processes while preparing for your online project management certificate.	24 hrs/1 cred
Project Management Scheduling Software	Project management software increases the ability of the project manager to work more efficiently. The functions of project planning and scheduling, resource allocation and costing, progress monitoring, and reporting are explored in detail. Through the application of project software tools and techniques, students develop the skills required to manage successful projects.	42 hrs/3 cred
Project Management, Applications, and Simulation	Using a case study method, this course enables students to work through a simulated mock project where various project management tools and techniques will be applied. Working in teams, students will initiate, plan, execute, control, and close the simulated project. Activities will include project planning, decision-making, problem-solving, and presenting project progress.	36 hrs/3 cred
Purchasing		
Purchasing Fundamentals	In this course, learn how to define internal customer needs; generate purchase requisitions and purchase orders; expedite, trace, and receive supplier deliveries; maintain effective purchasing records; and create and manage various purchasing budgets. Explore business law, contracts, leasing, Six Sigma, and Total Quality Management (TQM). Discover how to recruit, select, and evaluate purchasing personnel, and learn the importance of business ethics.	24 hrs/1 cred
Purchasing I	This course is the introductory course in the fundamental nature of purchasing. Students will address how the effective use of this function can assist in the success of an organization. Purchasing is a critical process within the wider scope of Supply Chain Mgmt. This course provides the theoretical foundations, before learning how to apply the tools of Supply Mgmt and strategy, in the second course.	56 hrs/4 cred

Name of Continuing Education	Learning outcomes	Duration
Purchasing II	Building upon the foundation of the first purchasing course, this course will focus on the processes, tools, methods, and strategies applied in the most effective and efficient manner for purchasing activities; like sourcing, tendering, cost management, supplier/contract management & evaluation, and purchasing devolution. All of this will be reinforced through applied exercises and assignments, culminating with an introduction to how purchasing supports the overall organizational strategies and goals of customer satisfaction.	56 hrs/4 cred
Public Purchasing	Although purchasing is a process, based upon fundamental principles and best practices, there are some very unique differences between public and private sectors. While industrial, commercial and retail buying is directly linked to the generation of profit, public buying enables the delivery of satisfaction to all citizens and the fulfilment of public policy. This is further linked through political direction to influence socio-economic needs, with trade agreements, at all domestic and international levels. Therefore, the content of this course is designed to help the purchasing professional better understand the nature of public buying and the very different drivers which are leading the strategic directions of their organization.	42 hrs/3 cred
Purchasing	In this course, the student is introduced to the key concepts of purchasing for supply chain management. This includes a study of the functions that contribute to the acquisition and sale of goods, services, materials, the purchasing cycle, and the manner in which purchasing activity is integrated into and aligned to a firm's organizational strategy. Various elements of a purchasing strategy are detailed including the advantages and disadvantages of centralized various purchasing strategies, purchasing best practices, and tools and techniques for purchasing applications and oversight.	42 hrs/3 cred
Purchasing (cont'd)		
Manufacturing Purchasing	Purchasing within the context of a manufacturing organization has a unique set of knowledge, tools, methods, and skills required. When executed effectively purchasing can reduce risks, facilitate innovation, and improve overall value. Students in this course will examine and apply the various approaches to purchasing within a manufacturing or industrial context. They will explore how to reduce total cost of ownership by applying best practices, for acquisition of everything from raw materials to M.R.O. (Mtce-Repair-Operations) to Capital equipment. In addition, they will address issues of Occupational Health & Safety, environmental impacts and regulations (WHMIS-GHS), as well as sustainability. This will require an understanding of manufacturing processes, technical language, interpretation of blueprints and industry specific standards, with required certifications or testing reports.	42 hrs/3 cred
Scheduling		
Project Management Scheduling Software	Project management software increases the ability of the project manager to work more efficiently. The functions of project planning and scheduling, resource allocation and costing, progress monitoring, and reporting are explored in detail. Through the application of project software tools and techniques, students develop the skills required to manage successful projects.	42 hrs/3 cred
Construction Planning and Scheduling	The course covers in detail project planning, scheduling and control. Topics covered include project charter, developing work breakdown structure (WBS) and statement of work; developing project schedule; assign resource; perform resource and time constrained scheduling; estimate project cost and prepare project cost baseline; project monitoring and control; scheduling under uncertainty and computer application in project planning, scheduling and control.	42 hrs/3 cred
Tree Spacing/Planting		
No Applicable Courses – Other colleges or Universities will have applicable courses (e.g.: Trent University)		
Welding		
CWB Welding Qualification	This is a practical based welding course which will allow students the opportunity to perform practice welding exercises in order to develop the skills required to complete standard CSA structural welding tests with backing ('S' classification). Students will have the opportunity to weld in all 4 positions (flat, horizontal, vertical	60 hrs/0 cred

Name of Continuing Education	Learning outcomes	Duration
Industrial Maintenance Welding	<p>and overhead). Expectation is that successful students gain the necessary skills to pass real CWB administered qualification tests in one or more of the following processes: SMAW, GMAW, MCAW, FCAW. A qualified CWB inspector will be brought in to administer all “actual” weld testing. The completed tests will be sent to the Canadian Welding Bureau for further evaluation. Individuals who successfully complete the CWB testing will receive the appropriate welding ticket.</p> <p>This upskilling course is intended to provide Industrial Maintenance trades professionals with an understanding of the principles and safe practices for Shielded Metal Arc Welding (SMAW/Stick) and Gas Metal Arc Welding (GMAW/MIG) processes. Learners will enhance their welding and cutting skills. Experience in an industrial mechanical work setting is highly recommended. Participants are required to supply their own PPE including CSA approved safety shoes and clear safety glasses.</p>	<p>40 hrs/3 cred</p>