Education Micro-Credentials

CATALOGUE AND GUIDE

MC-CAT

EDITION 4 | February 2025 |

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Micro-Credential Primer

WHAT IS A MICRO-CREDENTIAL?

Micro-credentials are compact, focused courses that offer affordable and flexible options for learning and professional development. Each micro-credential is independent, and may be completed in any order as learners pursue personal goals or career growth.

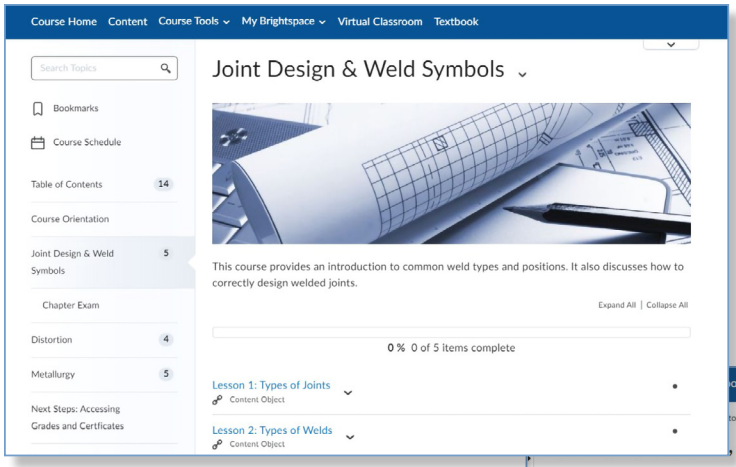
Choose what to learn and when. Micro-credentials allow learners to fit education into busy schedules and other obligations. There are no course schedules or classes to attend; log in and learn at your own pace and on your own time.

ONLINE LESSONS, ON YOUR TIME

Each micro-credentials allows learners to explore a subject in detail through engaging online lessons. Put that knowledge to the test with interactive exercises, knowledge checks, and exams. Content is accessible for hobbyists looking to improve their skills, yet detailed for professionals seeking to stay current in their field or make a career change.

Online lessons bring learning to life with animations and video, and a variety interactive activities enable you to engage directly with key concepts. Return to and review previous lessons to prepare for quizzes and exams designed to challenge what you've learned and provide immediate feedback on your responses.

Dive deeper into each course with comprehensive digital textbooks, links to industry articles or videos, and other student resources. All content is available for the duration of the course, and can be accessed at any time from your phone, tablet, laptop or other digital device.



EASY NAVIGATION

Intuitive controls and customizable settings ensure a comfortable experience and allow students to focus on learning.

BOOKMARKS

Create custom lesson bookmarks to flag important content, or to easily return to where you left off.

ACCESSIBLE CONTENT

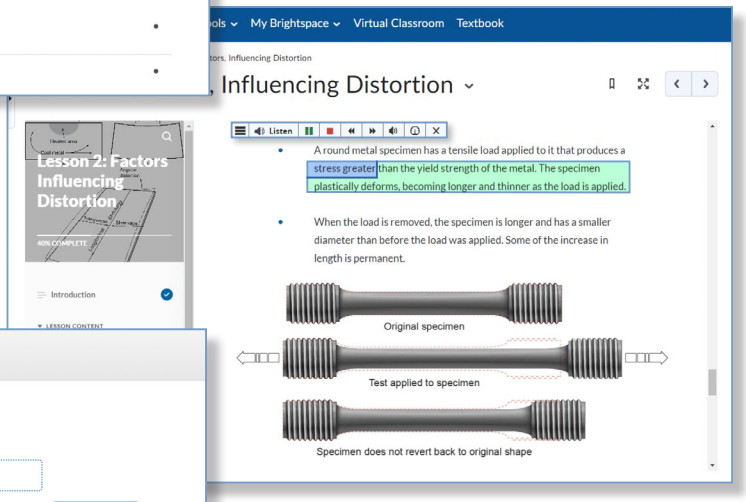
Have text read aloud with the built in webReader tool. Choose from a variety of voices, reading speeds, and highlighting options.

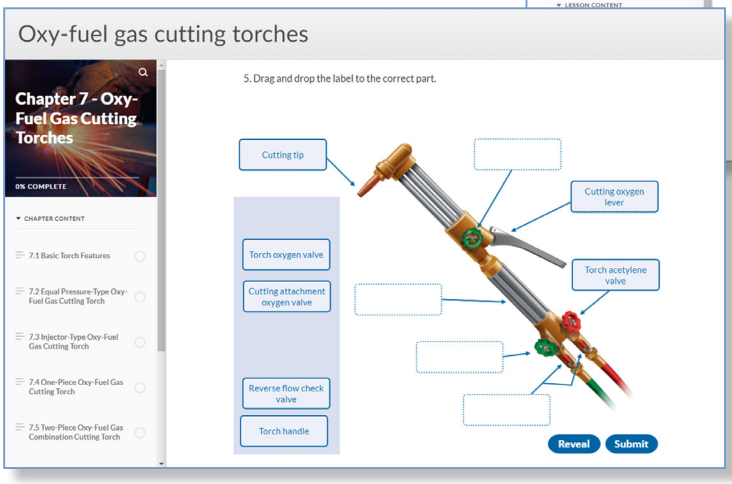
LANGUAGE SUPPORT

WebReader supports a built-in dictionary for easy reference, and can translate highlighted passages.

ACTIVE LEARNING

Replayable lessons, scenarios and knowledge checks reinforce key concepts before proceeding to the next lesson.





INTERACTIVE ACTIVITIES

Engage learners with a variety of interactive activities, all designed to reinforce key concepts and increase information retention.

IMAGES AND MULTIMEDIA

Modern, full-colour images, animations and videos help students visualize information, engage with lessons, and reinforce concepts.

DIVE DEEPER WITH DIGITAL TEXTBOOKS

Access to digital textbooks is included with all micro-credential courses, and powered by the Redshelf platform and its built-in e-reader. Access is integrated directly with the Learning Resources online portal — with no additional log-in needed. Digital textbooks are viewable directly in your browser, and require no additional plugins or apps.

Take advantage of powerful features like easy navigation and search functions, highlighter and flashcard note-taking tools, and adjustable text-to-speech options. All digital textbooks meet industry standards for accessibility, and can be viewed online or downloaded for offline viewing.

TABLE OF CONTENTS

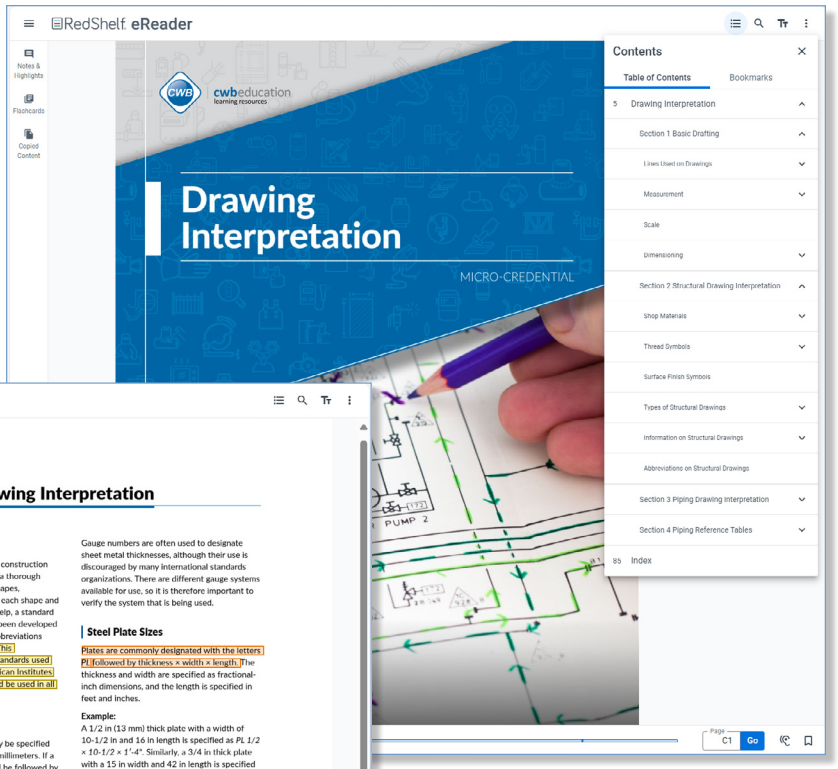
Locate topics with the slide-out table of contents. Expand and jump to sections and sub-sections anytime.

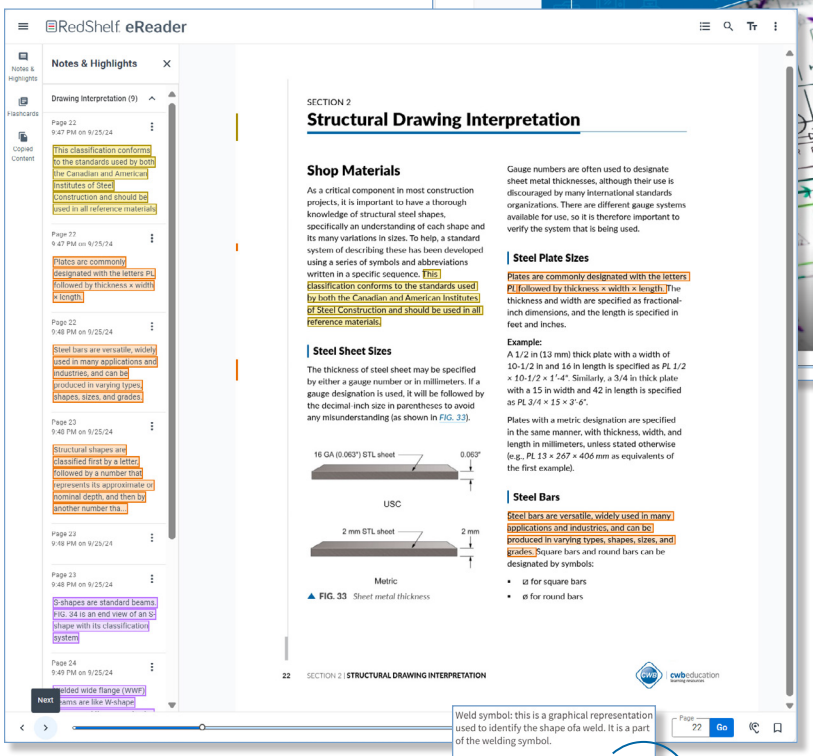
TEXT TO SPEECH

In-browser, text-to-speech tool reads textbook content. Customize playback with a variety of voices and adjustable reading rates.

REVIEW AND STUDY

Search for, jump to, and review highlighted material and notes when it's time to study.





HIGHLIGHT KEY MATERIAL

Get organized with colour-coded highlight options, or record and edit notes on the go.

EASY NAVIGATION

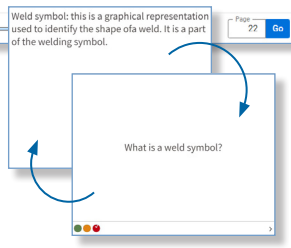
Adjust view settings and perform common tasks with keyboard inputs. Jump to, and bookmark, important pages.

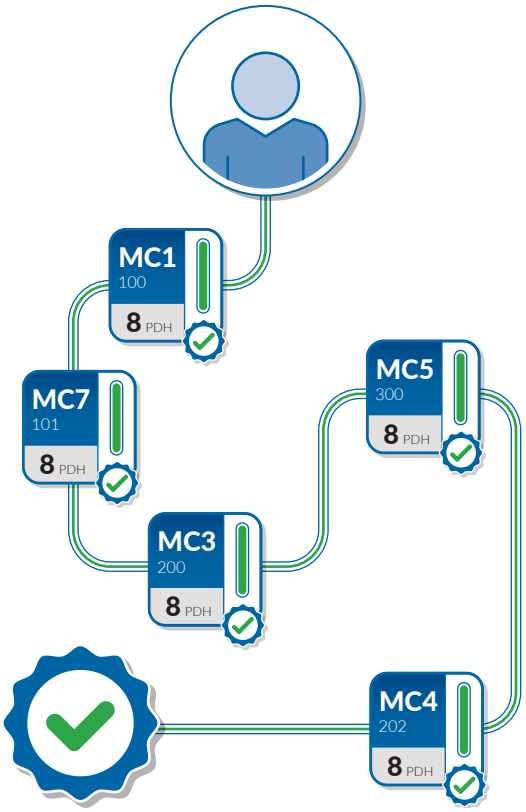
OFFLINE ACCESS

Download textbooks for offline access anywhere, anytime. Add downloaded books or sections to your browser's bookmarks for easy access later.

CREATE FLASHCARDS

Create custom flashcard decks as a study aid. When it's time to review, use the color tags to flag difficult passages for study, or check off progress.





GET WHERE YOU NEED TO GO WITH PATHWAYS

Carve your own path to grow your career. Stack micro-credentials to build on knowledge or branch out and explore new learning opportunities.

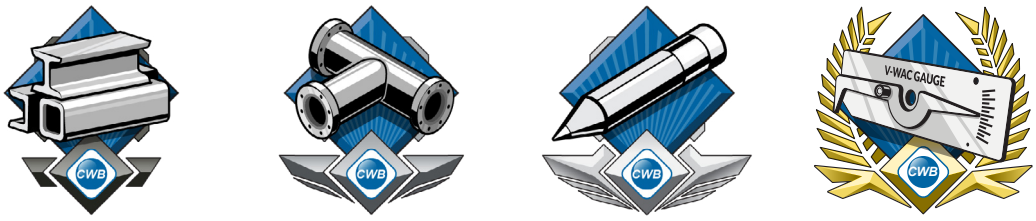
Defined stacks of micro-credential courses are called pathways, and provide a clear route to recognized, expert-level knowledge sets, with some offering paths to new or advanced careers.

There are two types of pathways. Certification pathways provide a clear route for those seeking to progress their career as a certified welding inspector or welding supervisor. Recognized pathways link courses that combine to provide complimentary knowledge sets, providing job-ready skills in existing or future positions.

Whether choosing a defined pathway or forging their own, learners have the flexibility and control to guide their own development.

PDHS, CERTIFICATES, AND BADGES

Completing a micro-credential course awards a certificate of completion and professional development hours (PDHs), which can be used to re-certify or satisfy other professional requirements. Share your achievements on social and professional networks with unique online badges that validate your personal knowledge and skill sets.



DRLF-101 | DRLF-201 | DINT-301 | LEVEL 1 INSPECTOR

LEVEL 100 BADGES
Level 100 courses are introductory and provide basic concepts and skills.

LEVEL 200 BADGES
Level 200 courses provide an intermediate experience that builds on existing knowledge.

LEVEL 300 BADGES
Level 300 courses are for professionals looking to upgrade skills and gain expertise.

COURSE BADGES
A special badge is awarded upon completion of all courses in a given pathway.

DELIVERY AND ACCESS

CWB Education Learning Resources micro-credential courses are self-directed and can be taken asynchronously as standalone offerings through the CWB website. All courses include tutorial time with an instructor, digital textbooks, badges, certificates, and online lessons.

Upon successful completion and achieving 70% or above on the course exam, you'll receive a certificate of course completion and be awarded a set number of PDHs.

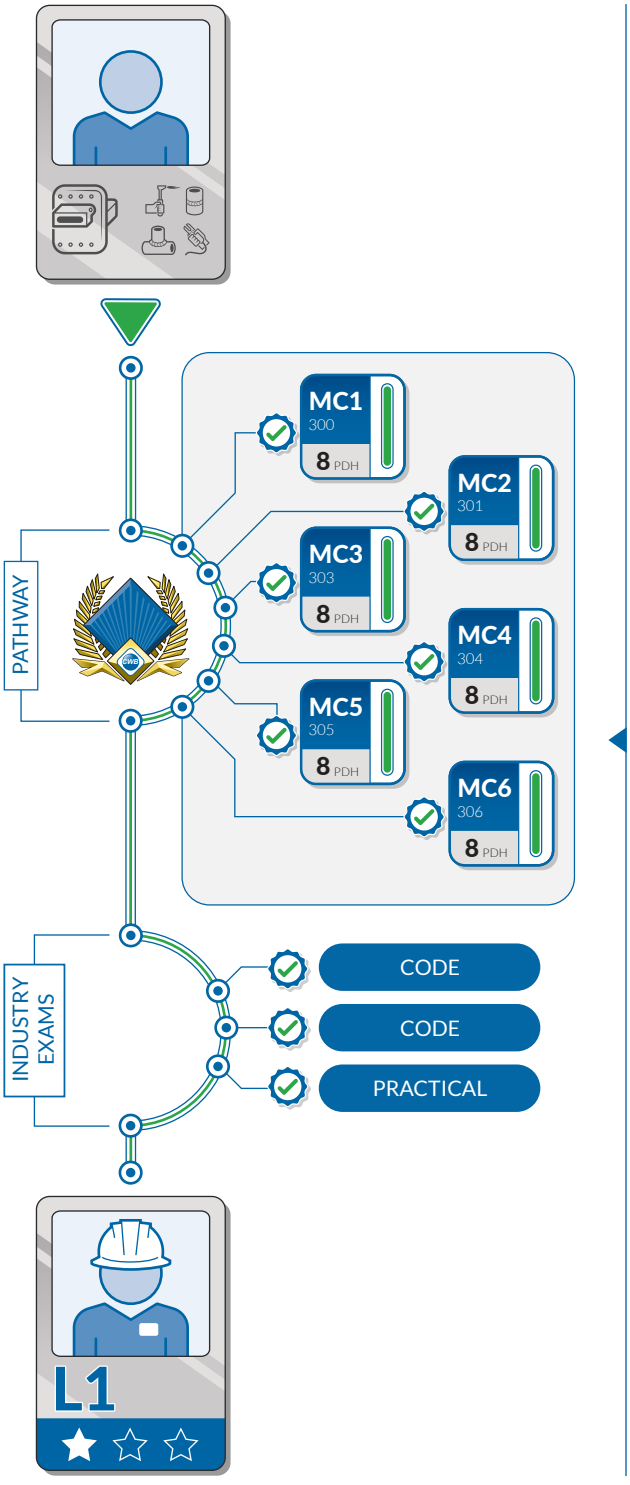
Powered by D2L's Brightspace Learning Management System, once enrolled you'll have 90 days to access digital books and other course material, and complete all online lessons and exams.

INSTRUCTOR LED OPEN OFFICE HOURS

Included in all micro-credential courses is access to open office hours where you and other course participants can ask CWB subject matter experts questions and discuss the course material.

One pre-scheduled session per month is available on each subject. Scheduled times are posted in the Brightspace Learning Management System.

Certification Pathways and Courses



Certification pathways identify specific micro-credentials that support knowledge and skill sets critical to prepare and qualify for the Level 1, Level 2, and Level 3 Welding Inspector certification exams. Individuals may complete the courses in any order and at their own pace.

Successful completion of the course material and course examinations provides exemption from writing the closed book CSA W178.2 certification examination on the fundamental principles and practices of welding, quality control, and welding inspection, resulting in the candidate only needing to complete the two code exams and the Practical Exam for CSA Level 1 Inspector.

Certification pathways and courses related to Level 1 and Level 2 Inspector are identified on the following pages.

For more information about certification services, please *contact us* by email, phone, or web chat by using the code on the left.

LEVEL 1 WELDING INSPECTOR

This pathway is designed for candidates who want to increase their knowledge of metallurgy, inspection and testing techniques. This is your first step to advancing your career and increasing your earning potential.

- Welding Health and Safety HEAL-102
- Intermediate Drawing Interpretation DINT-301
- Joint Design and Preparation JDPR-302
- Intermediate Welding Symbols SYMS-302
- Welding Processes PROC-301
- Metallurgy and Material Specification METL-301
- Codes, Standards, and Specifications SCWQ-301
- Basic Inspection Codes and Methods BICM-301
- Visual Inspection Concepts and Techniques VICT-301
- Welding Faults: Inspection and Causes WFIC-301
- Functions of the Inspector INSP-301

NOTE

In addition to completion of these courses and course exams, learners looking to become certified to Level 1 Welding Inspector must complete the requisite application and forms. Scan the code on the left for *more information* on the certification process.

LEVEL 2 WELDING INSPECTOR

This pathway is designed for Level 1 Welding Inspectors who want to further increase their knowledge of inspection and testing techniques.

- Welding Processes and Equipment PROC-303
- Power Sources for Welding PSFW-301
- Electrodes and Consumables ELEC-301
- Residual Stress and Distortion RSDI-301
- Review of Physical Metallurgy METL-302
- Introduction of Welding Metallurgy of Steel METL-303
- Metallurgy of Stainless Steels METL-304
- Mechanical Testing of Welds MTWL-301
- Surface Inspection SURF-301
- Radiographic Inspection RADI-301
- Ultrasonic Inspection ULTR-301

NOTE

In addition to completion of these courses and course exams, learners looking to become certified to Level 2 Welding Inspector must complete the requisite application and forms. Scan the code on the left for *more information* on the certification process.

LEVEL 3 WELDING INSPECTOR

This pathway is designed for Level 2 Welding Inspectors seeking certification to CSA Standard W178.2 Level 3 or who want to further increase their knowledge of welding metallurgy across a variety of material types and be introduced to quality management.

- The Impact of Structure on Weldability STRU-301
- Welding Metallurgy: Steels METL-306
- Welding Metallurgy: Non-Ferrous Metals METL-307
- Welding Metallurgy: Aluminum METL-308
- Welding Metallurgy: Cast Iron METL-309
- Aluminum Fundamentals ALUM-201
- Quality Management Basics QUAL-301

NOTE

In addition to completion of these courses and course exams, learners looking to become certified to Level 3 Welding Inspector must complete the requisite application and forms. Scan the code on the left for *more information* on the certification process.

ALUMINUM FUNDAMENTALS

COURSE INFO

This is an intermediate level course focusing on comprehensive knowledge of the production of aluminum, aluminum properties, safety considerations, handling and material preparation, aluminum designations, and more.

8 PDHs | $305

DETAILS

CODE
ALUM-201

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 3

PRE-REQUISITE
None

BASIC INSPECTION CODES AND METHODS

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of basic inspection codes and methods. Topics include the qualifications, functions, and duties of a welding inspector, describing the different stages of welding inspection, and the principles, techniques, and applications of non-destructive testing methods.

8 PDHs | $305

DETAILS

CODE
BICM-301

LANGUAGES AVAILABLE
English, French

PATHWAY
Inspector Level 1

PRE-REQUISITE
None

CODES, STANDARDS, AND SPECIFICATIONS

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of codes, standards, and specifications related to welding. Topics include identifying the primary agencies that set codes and standards, identifying and describing welding codes and standards used in North America, and describing the responsibilities of the CWB Group.

8 PDHs | $305

DETAILS

CODE
SCWQ-301

LANGUAGES AVAILABLE
English, French

PATHWAY
Inspector Level 1

PRE-REQUISITE
None

ELECTRODES AND CONSUMABLES

COURSE INFO

This professional level course focuses on comprehensive knowledge of welding electrodes and consumables. Topics include understanding the groupings and classifications of standard electrodes covered in various CSA and AWS standards, understanding the basic classifications for low alloy steel, stainless steel, aluminum, copper and nickel alloy electrodes, understanding classification of electrodes for soldering and brazing filler metals, and more.

8 PDHs | $305

DETAILS

CODE
ELEC-301

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 2

PRE-REQUISITE
None

FUNCTIONS OF THE INSPECTOR

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of the functions of a welding inspector. Topics include interpreting a mill test report, verifying welding procedure specifications have been properly qualified, explaining the processes required for inspection prior to, during, and after welding, and more.

8 PDHs | $305

DETAILS

CODE
INSP-301

LANGUAGES AVAILABLE
English, French

PATHWAY
Inspector Level 1

PRE-REQUISITE
None

THE IMPACT OF STRUCTURE ON WELDABILITY

COURSE INFO

This is a comprehensive professional level course focusing on the relationship between a metal's basic properties within equilibrium conditions and its behavioural conditions in welding. Topics covered include basic metal structures and their behaviours, methods of changing the mechanical properties of alloys, phase diagrams, the effects of welding procedures on solidification structures, and more.

12 PDHs | $305

DETAILS

CODE
STRU-301

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 3

PRE-REQUISITE
METL-301,
METL-302,
METL-303

INTERMEDIATE DRAWING INTERPRETATION

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of drawing interpretation. Topics include types of drawings, interpreting structural drawings, types of pipe drawings, views, and drawing information, and more.

8 PDHs | $305

DETAILS

CODE
DINT-301

LANGUAGES AVAILABLE
English, French

PATHWAY
Inspector Level 1

PRE-REQUISITE
None

INTERMEDIATE WELDING SYMBOLS

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of welding symbols. Topics include the key elements of welding symbols, symbols used for fillet, groove, arc spot and plug welds, combined symbols, and symbols referenced by CSA, AWS, and ISO.

8 PDHs | $305

DETAILS

CODE
SYMS-302

LANGUAGES AVAILABLE
English, French

PATHWAY
Inspector Level 1

PRE-REQUISITE
None

INTRODUCTION OF WELDING METALLURGY OF STEEL

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of welding metallurgy of steel. Topics covered in this course include metallurgical transformations, cracking tests, lamellar tearing, meld metal reactions, avoidance of hydrogen induced cold crack, and more.

8 PDHs | $305

DETAILS

CODE
METL-303

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 2

PRE-REQUISITE
METL-301 and METL-302

JOINT DESIGN AND PREPARATION

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of joint design and preparation. Topics include describing the different types of welded joints, describing the mechanical method of joint preparation, identifying the effects of thermal and non-thermal cutting and gouging, and more.

8 PDHs | $305

DETAILS

CODE
JDPR-302

LANGUAGES AVAILABLE
English, French

PATHWAY
Inspector Level 1

PRE-REQUISITE
None

MECHANICAL TESTING OF WELDS

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of mechanical testing of welds. Topics covered in this course include the concepts of stress and strain, the method behind tensile tests and bend tests, the requirements of various codes for tensile and bend tests, and more.

8 PDHs | $305

DETAILS

CODE
MTWL-301

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 2

PRE-REQUISITE
BICM-301 and VICT-301

METALLURGY AND MATERIAL SPECIFICATION

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of metallurgy. Topics include identifying the groupings, properties, and applications of engineered materials, identifying the microstructures of steel, interpret the iron-carbon phase diagram, describe tests for identifying metals, and more.

8 PDHs | $305

DETAILS

CODE
METL-301

LANGUAGES AVAILABLE
English, French

PATHWAY
Inspector Level 1

PRE-REQUISITE
None

METALLURGY OF STAINLESS STEELS

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of welding metallurgy of stainless steels. Topics covered in this course include explaining the role of various alloying elements in stainless steels, explaining the major problems in welding stainless steels and how to overcome them, understanding the welding procedures for stainless steels, and more.

8 PDHs | $305

DETAILS

CODE
METL-304

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 2

PRE-REQUISITE
METL-301, METL-302, METL-303

POWER SOURCES FOR WELDING

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of power sources used in welding. Topics include describing the static and dynamic characteristics of welding power sources, distinguishing between conductors and insulators, describing the evolution of welding power sources, and more.

8 PDHs | $305

DETAILS

CODE
PSFW-301

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 2

PRE-REQUISITE
SMAW-101, GTAW-101, and WIRE-101

QUALITY MANAGEMENT BASICS

COURSE INFO

This is an intermediate level course focusing on the concepts of quality and quality management. It provides an overview of the ISO 9001:2015 Standard with specific examples of how it relates to welding inspection.

12 PDHs | $305

DETAILS

CODE
QUAL-301

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 3

PRE-REQUISITE
None

RADIOGRAPHIC INSPECTION

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of radiographic inspection of welds. Topics covered in this course include describing how radiography works, explaining how images are formed and what controls their quality, recognizing radiographic images of various defects, describing safety practices with radiographic inspection, and more.

8 PDHs | $305

DETAILS

CODE
RADI-301

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 2

PRE-REQUISITE
VICT-301 and WFIC-301

RESIDUAL STRESS AND DISTORTION

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of welding related stress and distortion. Topics covered in this course include, describing the causes of distortion, identifying the residual stress patterns in rolled shapes, identifying the types of distortion and explaining techniques of limiting and controlling distortion, and more.

8 PDHs | $305

DETAILS

CODE
RSDI-301

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 2

PRE-REQUISITE
DIST-101

REVIEW OF PHYSICAL METALLURGY

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of physical metallurgy. Topics covered in this course include, understanding the making of iron and steel, understanding the crystallographic differences between the ferrite and austenite lattice, understanding strengthening mechanisms, and more.

8 PDHs | $305

DETAILS

CODE
METL-302

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 2

PRE-REQUISITE
METL-301 or previous course experience with welding metallurgy

SURFACE INSPECTION

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of surface inspection of welds. Topics covered in this course include explaining the basic principles of LP and MP inspection methods, understanding the components of typical inspection procedures and techniques, identifying false and non-relevant indications, and more.

8 PDHs | $305

DETAILS

CODE
SURF-301

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 2

PRE-REQUISITE
VICT-301 and WFIC-301

ULTRASONIC INSPECTION

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of ultrasonic inspection of welds. Topics covered in this course include describing how ultrasonic inspection works, calibrating equipment and the suitability of equipment and materials for the specifications of ultrasonic testing, describe the typical code requirements governing ultrasonic testing, and more.

8 PDHs | $305

DETAILS

CODE
ULTR-301

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 2

PRE-REQUISITE
VICT-301 and WFIC-301

VISUAL INSPECTION CONCEPTS AND TECHNIQUES

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of visual inspection concepts and techniques. Topics include identifying types of measurement errors, identifying measuring devices used for inspection, describing the application of acceptance criteria, and more.

8 PDHs | $305

DETAILS

CODE
VICT-301

LANGUAGES AVAILABLE
English, French

PATHWAY
Inspector Level 1

PRE-REQUISITE
None

WELDING FAULTS: INSPECTION AND CAUSES

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of welding faults. Topics include identifying different types of weld discontinuities, describing the causes of weld discontinuities, and applying visual inspection criteria.

8 PDHs | $305

DETAILS

CODE
WFIC-301

LANGUAGES AVAILABLE
English, French

PATHWAY
Inspector Level 1

PRE-REQUISITE
None

WELDING PROCESSES

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of welding processes. Topics include describing the classification of welding processes, identifying torches/guns for each welding process, explaining weld soundness and variables associated with each welding process, and identifying typical discontinuities for each welding process.

8 PDHs | $305

DETAILS

CODE
PROC-301

LANGUAGES AVAILABLE
English, French

PATHWAY
Inspector Level 1

PRE-REQUISITE
None

WELDING METALLURGY: ALUMINUM

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of the properties of aluminum that affect welding, the types of heat treatment processes and their effects, and more.

12 PDHs | $305

DETAILS

CODE
METL-308

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 3

PRE-REQUISITE
METL-301, METL-302, METL-303, STRU-301

WELDING METALLURGY: CAST IRON

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of the types of cast iron, fundamental principles of cast iron composition, microstructure, and properties, various types of heat treatment processes and the effects of these processes, and more.

12 PDHs | $305

DETAILS

CODE
METL-309

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 3

PRE-REQUISITE
METL-301, METL-302, METL-303, STRU-301

WELDING METALLURGY: NON-FERROUS METALS

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of the properties of non-ferrous metals that affect welding, issues encountered when welding non-ferrous metals, various types of heat treatment processes and the effects of these processes, and more.

12 PDHs | $305

DETAILS

CODE
METL-307

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 3

PRE-REQUISITE
METL-301, METL-302, METL-303, STRU-301

WELDING METALLURGY: STEELS

COURSE INFO

This is a professional level course focusing on comprehensive knowledge of the fundamental principles of steel composition, microstructure, and properties, various types of heat treatment processes and the effects of these processes, and more.

12 PDHs | $305

DETAILS

CODE
METL-306

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 3

PRE-REQUISITE
METL-301, METL-302, METL-303, STRU-301

WELDING PROCESSES AND EQUIPMENT

COURSE INFO

This is a professional level course focusing on advanced welding processes and equipment. It provides an overview of major welding processes, with emphasis on arc welding, and a broad understanding of the principles of operation of each process, general characteristics and equipment. Processes such as resistance welding (RW), plasma arc welding (PAW), electron beam (EBW), laser beam welding (LBW) and electroslag welding (ESW) are also covered.

8 PDHs | $305

DETAILS

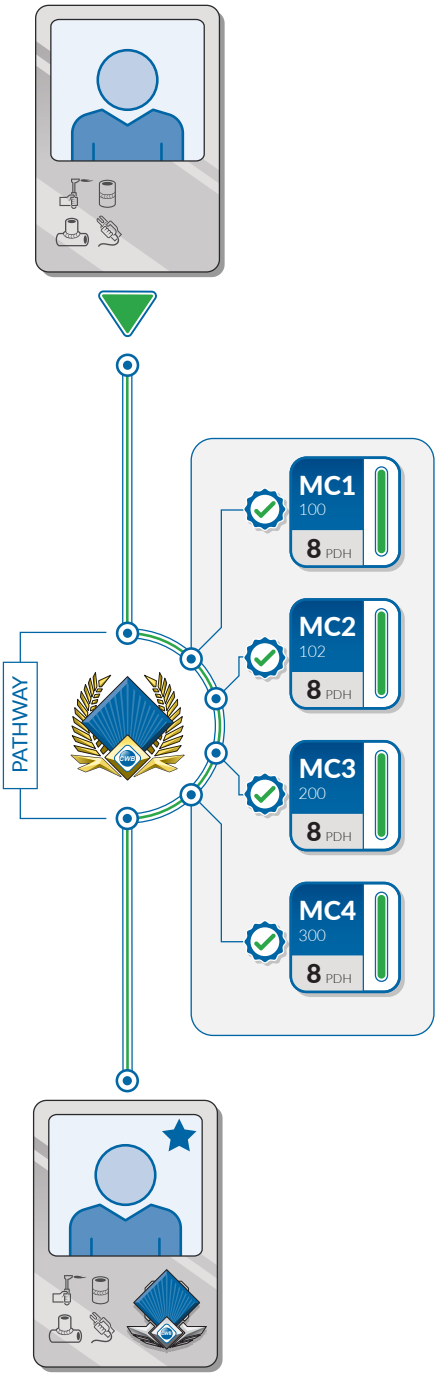
CODE
PROC-303

LANGUAGES AVAILABLE
English

PATHWAY
Inspector Level 2

PRE-REQUISITE
PROC-301 or course experience in welding processes

Recognized Pathways and Courses



Upgrade your knowledge with recognized pathways. Each pathway identifies complimentary courses that builds toward improving in your current job or expanding your horizons to a new one.

Recognized pathways and courses are perfect for those looking for an introduction to a certain subject, or looking to expand on basic skills.

METALLURGY CERTIFICATE

Metallurgy involves understanding the physical, chemical, and mechanical properties of welding. This pathway progressively builds on the concepts of welding metallurgy and successful completion of all four courses provides recognition of a metallurgy certificate of completion.

- Metallurgy and Material Specification
  METL-301
- Review of Physical Metallurgy
  METL-302
- Introduction of Welding Metallurgy of Steel
  METL-303
- Metallurgy of Stainless Steels
  METL-304

INSPECTION BASICS

Certified Welding Inspectors play a vital role in the fabrication industry. Their responsibilities have a direct bearing on final product quality and thus public safety. This pathway involves understanding specifications, weld faults, and the functions of an inspector to help industry avoid repairs and costly project delays.

- Basic Inspection Codes and Methods
  BICM-301
- Codes, Standards, and Specifications
  SCWQ-301
- Functions of the Inspector
  INSP-301
- Visual Inspection Concepts and Techniques
  VICT-301
- Welding Faults: Inspection and Causes
  WFIC-301

DESTRUCTIVE AND NON-DESTRUCTIVE TESTING

Non-destructive testing is used in a wide range of industries including manufacturing, fabrication, oil and gas as well as transportation. This pathway covers inspection techniques used to pro-actively identify faults that could lead to product failure and or public or environmental safety.

- Mechanical Testing of Welds
  MTWL-301
- Surface Inspection
  SURF-301
- Radiographic Inspection
  RADI-301
- Ultrasonic Inspection
  ULTR-301

WELDING FUNDAMENTALS

Welders are highly skilled tradespeople involved with the construction, repair, fabrication, and maintenance of critical infrastructure. This pathway provides a basic understanding of various arc welding processes as well as the power sources and consumables involved with them.

- Welding Processes
  PROC-301
- Power Sources for Welding
  PSFW-301
- Electrodes and Consumables
  ELEC-301

BASIC DRAFTING AND STRUCTURAL DRAWING INTERPRETATION

COURSE INFO

This course is an introductory course focusing on the fundamentals of drawing interpretation. Topics include types of drawings, types of views, units of measurement, and more.

12 PDHs | $145

DETAILS

CODE
DRLF-101

LANGUAGES AVAILABLE
English, French

PATHWAY
None

PRE-REQUISITE
None

BASIC GAS TUNGSTEN ARC WELDING

COURSE INFO

This course is an introductory course focusing on the fundamentals of gas tungsten arc welding (GTAW). Topics include power sources, process variables, discontinuities, and more.

12 PDHs | $145

DETAILS

CODE
GTAW-101

LANGUAGES AVAILABLE
English, French

PATHWAY
None

PRE-REQUISITE
None

BASIC SHIELDED METAL ARC WELDING

COURSE INFO

This course is an introductory course focusing on the fundamentals of shielded metal arc welding (SMAW). Topics include power sources, SMAW equipment, process variables, and more.

12 PDHs | $145

DETAILS

CODE
SMAW-101

LANGUAGES AVAILABLE
English, French

PATHWAY
None

PRE-REQUISITE
None

BASIC WELDING METALLURGY

COURSE INFO

This course is an introductory course focusing on the fundamentals of welding metallurgy. Topics include mechanical and physical properties of metal, weldability of steels, heat treatment, and more.

12 PDHs | $145

DETAILS

CODE
METL-101

LANGUAGES AVAILABLE
English, French

PATHWAY
None

PRE-REQUISITE
None

BASIC WIRE PROCESS WELDING

COURSE INFO

This course is an introductory course focusing on the fundamentals of wire process welding. Topics include power sources, gas metal arc welding (GMAW), modes of metal transfer, and more.

16 PDHs | $145

DETAILS

CODE
WIRE-101

LANGUAGES AVAILABLE
English, French

PATHWAY
None

PRE-REQUISITE
None

CODES, STANDARDS, SPECIFICATIONS, AND WELDER QUALIFICATIONS

COURSE INFO

This course is an intermediate course focusing on the codes and standards as they relate to various certification bodies. Topics include agencies that set codes and standards, structural applications, pressure applications, and more.

12 PDHs | $145

DETAILS

CODE
SCWQ-201

LANGUAGES AVAILABLE
English

PATHWAY
None

PRE-REQUISITE
None

DISTORTION

COURSE INFO

This course is an introductory course focusing on the fundamentals of distortion. Topics include factors influencing distortion, control of distortion, correction of distortion, and more.

12 PDHs | $145

DETAILS

CODE
DIST-101

LANGUAGES AVAILABLE
English, French

PATHWAY
None

PRE-REQUISITE
None

DRAWINGS, LAYOUT, AND FABRICATION

COURSE INFO

This course is an intermediate course focusing on structural drawings, pipe drawings, layout and fabrication. Topics include pipe fittings, reading pipe drawings, fitting and fabrication equipment, and more.

16 PDHs | $145

DETAILS

CODE
DRLF-201

LANGUAGES AVAILABLE
English

PATHWAY
None

PRE-REQUISITE
DRLF-101

GMAW ORBITAL WELDING

COURSE INFO

This course is an advanced course focusing on the fundamentals of GMAW orbital welding. This program has been developed in partnership with Liburdi Automation and details the use of their industry leading orbital equipment. Topics include welding heads, joint design and preparation, system operation, and more.

24 PDHs | $999

DETAILS

CODE
ORBI-301

LANGUAGES AVAILABLE
English

PATHWAY
None

PRE-REQUISITE
None

GTAW ORBITAL WELDING

COURSE INFO

This course is an advanced course focusing on the fundamentals of GTAW orbital welding. This program has been developed in partnership with Liburdi Automation and details the use of their industry leading orbital equipment. Topics include welding heads, joint design and preparation, system operation, and more.

24 PDHs | $999

DETAILS

CODE
ORBI-302

LANGUAGES AVAILABLE
English

PATHWAY
None

PRE-REQUISITE
None

LIFTING, HOISTING, AND RIGGING

COURSE INFO

This course is an introductory course focusing on the fundamentals of lifting, rigging, and hoisting. Topics include safe handling and storage of materials, calculating the weight of loads, sling configurations applications and working load limits, and many more.

12 PDHs | $145

DETAILS

CODE
MLHG-101

LANGUAGES AVAILABLE
English, French

PATHWAY
None

PRE-REQUISITE
None

OXY-FUEL CUTTING

COURSE INFO

This course is an introductory course focusing on the fundamentals of oxy-fuel cutting. Topics include oxy-fuel cylinder safety, pressure regulators and their functions, start up and shut down procedures, and more.

12 PDHs | $145

DETAILS

CODE
OFC-101

LANGUAGES AVAILABLE
English, French

PATHWAY
None

PRE-REQUISITE
None

PLASMA ARC CUTTING

COURSE INFO

This course is an introductory course focusing on the fundamentals of plasma arc cutting. Topics include applications, operating variables, elements affecting quality and plasma arc cutting process.

2 PDHs | Packaged with other courses

DETAILS

CODE
PAC-101

LANGUAGES AVAILABLE
English, French

PATHWAY
None

PRE-REQUISITE
None

WELDING HAND AND POWER TOOLS

COURSE INFO

This course is an introductory course focusing on the fundamentals of welding hand and power tools. Topics include hand tools, measuring tools, cutting tools, and many more.

12 PDHs | $145

DETAILS

CODE
TOOL-101

LANGUAGES AVAILABLE
English, French

PATHWAY
None

PRE-REQUISITE
None

WELDING HEALTH AND SAFETY

COURSE INFO

This course is an introductory course focusing on the fundamentals of welding health and safety. Topics include workplace health and safety, personal protective equipment (PPE), fire hazard precautions, and many more.

12 PDHs | $145

DETAILS

CODE
HEAL-101 or HEAL-102

LANGUAGES AVAILABLE
English, French

PATHWAY
None

PRE-REQUISITE
None

WELDING SYMBOLS

COURSE INFO

This course is an introductory course focusing on the fundamentals welding symbols. Topics include construction of a welding symbol, combination weld symbols, NDE symbols, and more.

12 PDHs | $145

DETAILS

CODE
DRLF-101

LANGUAGES AVAILABLE
English, French

PATHWAY
None

PRE-REQUISITE
None

WELD QUALITY AND DISCONTINUITIES

COURSE INFO

This course is an introductory course focusing on the fundamentals of weld quality and discontinuities. Topics include discontinuities and defects, geometric discontinuities, structural discontinuities, and more.

12 PDHs | $145

DETAILS

CODE
QUAL-101

LANGUAGES AVAILABLE
English, French

PATHWAY
None

PRE-REQUISITE
None

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