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# TCP ECI Certification Update

02/14/2024

# Education and Certification

Be the leader in industry training and certification with a focus on quality, relevance, and accessibility.

a. **MAINTAIN** the certification program to reflect the latest advances in technology, regulations, and best practices.

b. **IDENTIFY** and implement a variety of approaches to training to increase accessibility.

c. **IDENTIFY** training needs and interests, and expand content to meet those needs.

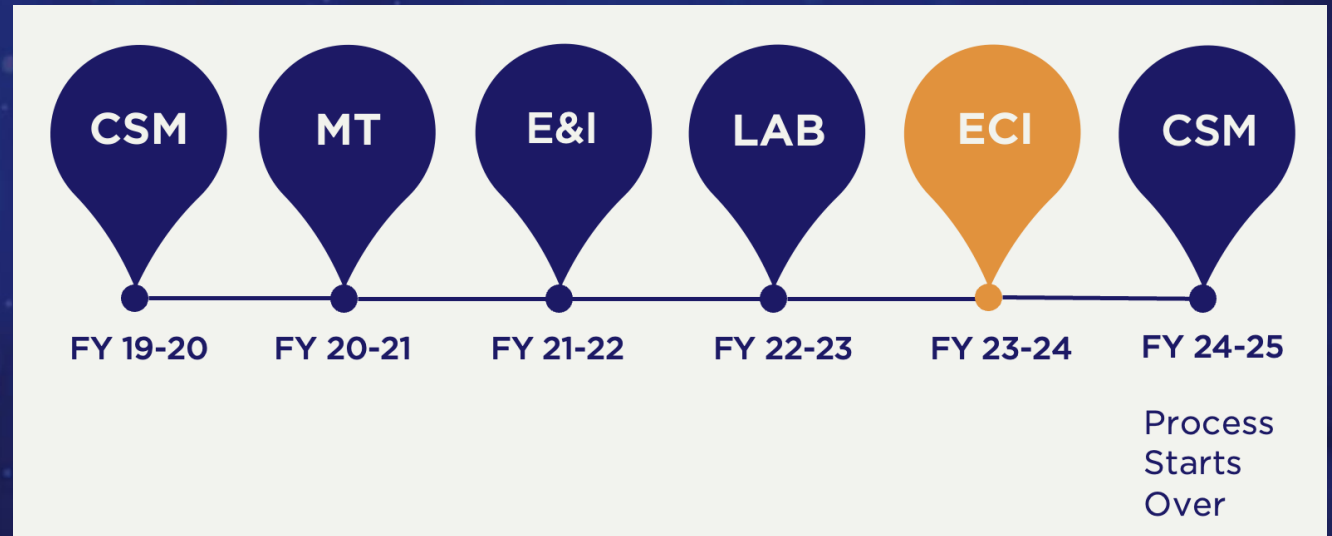d. **EXPAND** and diversify the pool of subject matter experts, speakers, and trainers.

**TACTIC 1:**

Revalidate exams on a continuous, rotating schedule per best practice for certification programs

**PERFORMANCE MEASURE**

**FY 22-23:**

ECI Grades 1-4 are completely revalidated, new exams released July 2023.

| CSM | MT | E&I | LAB | ECI | CSM |
|-----|-----|-----|-----|-----|-----|
| FY 19-20 | FY 20-21 | FY 21-22 | FY 22-23 | FY 23-24 | FY 24-25 |

Process Starts Over

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**TACTIC 2:**

Conduct annual monitoring and maintenance of exam performance to establish operational validity.

**PERFORMANCE MEASURE**

**FY 23-24:**

Ensure monitoring reports for ECI are completed and reviewed by TCP Committee/SMEs.

5-Year Exam Development & Maintenance Plan

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TECHNICAL CERTIFICATION PROGRAM

Completed by

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# Psy·cho·met·rics

The science of measuring mental capacities and processes.

**(aka Knowledge Measurement)**



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Michael Maurice, MPA
COO and Project Manager

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# ECI Update Progress



- Content outlines & Blueprints have been finalized
  - **30%** response rate to validation survey

- Launched new Minimum Qualifications
  - Last day to apply under old MQs is **Feb. 28th**!

- **85%** of the way to our item development goal

- Need more volunteers!

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| Specifications | Grade 1 | Grade 2 | Grade 3 | Grade 4 |
|---|---|---|---|---|
| **Brief description of the Grade Level in relation to the job family.** | Entry and basic working level. | Skilled or journey level. | Lead/advanced technical level. | Program manager level. |
| **Level of knowledge, skill and ability within the job family, in relation to job tasks, including the taxonomic level of knowledge applied on the job.** | Basic knowledge and ability, as needed to safely and effectively perform basic tasks. This includes: recall and recognition, comprehension, and application. | Knowledge and ability to safely and effectively accomplish most technical tasks in the job family. This includes: comprehension, application, and analysis. | Knowledge, skill and ability to safely and effectively accomplish and coordinate complex tasks. This includes: application, analysis and synthesis. | Knowledge, skill and ability to administer, coordinate and manage complex programs across vocations. This includes: analysis, synthesis, and evaluation. |
| **Level of supervision received.** | Receives direct supervision. | Receives limited supervision. | Receives general direction. | May receive broad direction. |
| **Level of supervision exercised.** | None. | May provide technical direction over other staff. | Will oversee and direct complex tasks performed by others. | Will coordinate program activities within or across vocations. |
| **Level of training provided to other personnel.** | None. | May train lower-level personnel. | May oversee a training program. | Designs and administers training program within the job family. |
| **Use of tools.** | Will recognize the basic tools of the job family. | Will be able to apply most of the tools used by those in the job family. | Will select tools for individuals and teams in relation to specific problems. | Manages and evaluates systems and facilities. |
| **Problem solving and troubleshooting responsibilities.** | Follows directions. | Troubleshoots and solves common problems without supervision. | Troubleshoots and solves complex problems. | Evaluates program effectiveness and takes corrective actions as needed. |
| **Actions in relation to safety problems.** | Recognizes unsafe conditions. | Recognizes and corrects unsafe conditions. | Anticipates and prevents unsafe conditions. | Designs and administers safety programs. |
| **Actions in relation to standard operating procedures (S.O.P.s), laws and regulations.** | Has the ability to follow S.O.P.s. | May assist in formulating and revising SOPs. | May oversee and formulates new S.O.P.s and ensure regulatory compliance. | Assures program compliance with laws and regulations. |
| **Actions in relation to documentation of work activities.** | Accurately completes records of work processes. | Accurately completes records of work processes and performs peer review of records. | Conducts audits of records of work processes for completeness, accuracy, and compliance, and recommends or takes necessary corrective action. | Responsible for quality assurance of program documentation, including management review and internal audits. |

| Content Domain | Weighting | # Items |
|---|---|---|
| Domain 1: Systems Construction, Operations, Maintenance | 29% | 29 |
| Domain 2: Collection Systems Tools and Equipment | 10% | 10 |
| Domain 3: Plans, Maps, and As-Builts | 16% | 16 |
| Domain 4: Safety and Regulations | 19% | 19 |
| Domain 5: Administration of Collection Systems | 22% | 22 |
| Domain 6: Math for Collection Systems | 4% | 4 |
| TOTAL | 100% | 100 |

## Domain 4: Safety and Regulations

| Sub-Domain | Description | Number of KT Statements | % Weight within Sub-Domain | # of Items |
|---|---|---|---|---|
| 4.1 | Safety policies and procedures | 5 | ■ | ■ |
| 4.2 | Confined space entry | 5 | ■ | ■ |
| 4.3 | Underground Service Alert | 2 | ■ | ■ |
| 4.4 | Traffic control practices and requirements | 3 | ■ | ■ |
| 4.5 | Safety regulations | 3 | ■ | ■ |
| 4.6 | Environmental protection regulations | 4 | ■ | ■ |

*0-2 items per KT statement.

# Minimum Qualifications

- Heavier weight given to formal education.
- CE credit acceptable in lieu of supervisory experience

Designed to build a better pathway into the profession while ensuring competency.

### Grade 1
- No experience required (1 year of experience in the vocation is recommended).

### Grade 2
- 2 years of experience in the vocation, OR
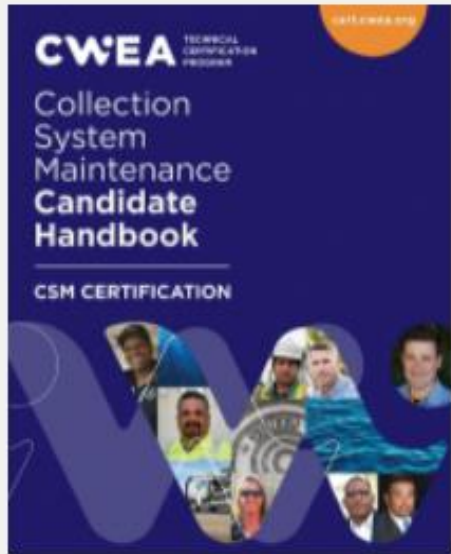    1 year with a bachelor's degree in a related field.

### Grade 3
- ECI Grade 2 certification in good standing, and
- 4 years of experience in the vocation, OR
    3 years with an associate degree in a related field, OR
    2 years with a bachelor's degree in a related field.

### Grade 4
- ECI Grade 3 certification in good standing, and
- 6 years of experience in the vocation OR
    5 years with associate degree in a related field OR
    4 years with a bachelor's degree in a related field, and
- 1 year of experience supervising others in a related field; OR proof of completion of a training course in management and supervision of at least 60 hours.

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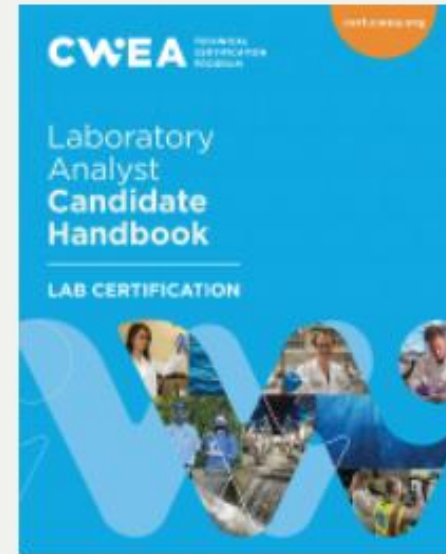# CWEA Technical Certification Program

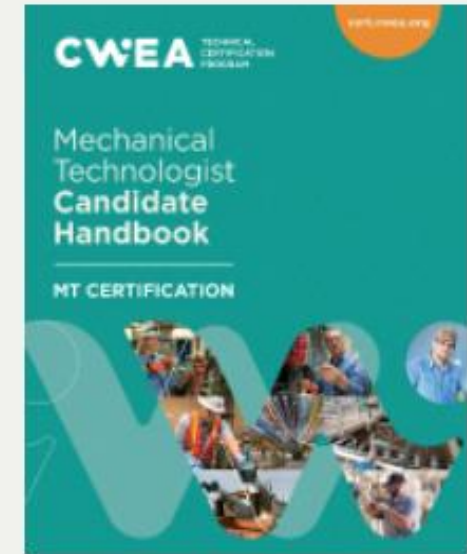## CANDIDATE HANDBOOKS



CSM Candidate
Handbook

ECI Candidate
Handbook

EIT Candidate
Handbook

LAB Candidate
Handbook

NEW! MT Candidate
Handbook

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