

# Discover. Connect. Advance."



# **Quality Management**

The Quality Management Certificate provides you with the necessary tools in Problem Solving, 5S Standardized Work, Quality Auditing, Lean Manufacturing Flow, Blueprint Reading with Geometric Dimensioning & Tolerancing (GDT) and Quality Gates to ensure consistency in processes for your organization, products and services, to best meet the needs of the customer. The **Quality Management Certificate** is one of four (4) certificates in the Quality Management Processes Pathway.

Non-Credit Course Code	Course Title	Hours	Days
CMGT 8021A	Problem Solving Tools	8	1
CQLY 8081A	5S Standardized Works	8	1
CQLY 8169	Quality Auditing Tools	16	2
CBPR 8012	Blueprint Reading GDT Metrology	32	4
CQLY 8135A	Lean Manufacturing Flow	8	1
CQLY 8168	Quality Gate	8	1
A certificate of completion will be awarded to students who successfully complete the above courses.		80 hours	10 days

# Problem Solving Tools and Techniques – CMGT 8021A– 8 hours

Prerequisite: None

The training will be a transition program for Managers, engineers, team leaders, production advisors, process engineers, production operators and others involved in investigating and resolving internal and external problems. It also covers effective approaches to developing, implementing or just upgrading a Problem-Solving system.

### 5S – Standardized Work– CQLY 8081A – 8 hours

Prerequisite: None

5S is a technique that results in a workplace that is clean, uncluttered, safe, and well organized. The 5S pillars provide a methodology for organizing, cleaning, developing, and sustaining a productive work environment. A 5S environment has "a place for everything and everything in its place," with all tools and materials ready where and when they are needed. Learn how 5S can help reduce waste and optimize productivity in any work environment.

### Quality Auditing Tools - CQLY 8169 – 16 hours

#### Prerequisite: None

This training focuses on methods and tools to conduct effective audits. The course will provide attendees with an understanding and the auditing techniques for the three auditing types 1) Product Audits 2) Process Audits and 3) System Audits. The course will provide an understanding of auditing tools such as the Gap Analysis, Layered Process Audits, and ISO/TS audits. In addition, give the student the instruments to convey audit results to internal and external customers and the means to improving audit scores.

### Blueprint Reading and GD&T - CBPR 8012 – 32 hours

#### Prerequisite: None

This thirty-two (32) hour course is designed to provide the skills in blueprint reading, geometric dimensioning & tolerance. The course provides an understanding of blueprints, and geometric dimensioning controls used on mechanical engineering drawings. Course topics include blueprint reading, dimensioning fundamentals, datums, and material condition symbols.

# Lean Manufacturing Flow - CQLY 8135A - 8 hours

Prerequisite: None

Learn the fundamentals of a Lean Manufacturing Flow through Value Stream Mapping (VSM) and Product Flow Development. Obtain understanding of the steps of creating the process family, documenting a current state map, developing a future state map and creating an implementation plan. Using these methods allows for synchronized product flow, with little waste, to meet your company and customers' needs for quality, cost and delivery objectives.

#### Quality Gate - CQLY 8168 – 8 hours

#### Prerequisite: None

Quality gates boost project quality by helping ensure that best practices are followed and measured against previous projects. In this course, you will learn about establishing a quality gate and the supportive tools that are required for a successful implementation of a quality gate.

### Additional areas of Quality Management Processes training:

- AS9100
- CMM Levels I-III
- IATE 16949
- Internal Auditors
- Kaizen
- Laser Tracking
- Metrology
- Six Sigma Green Belt Certification
- TS 16949/ISO 9100