Program Number 31-623-2
Technical Diploma • Two Terms

ABOUT THE PROGRAM

This technical diploma, Quality Process Improvement, provides you with the basic skills for quality assurance work. This credential 'ladders' up to the full two-year associate degree, Quality Assurance Technician. Quality Assurance is a program for the systematic monitoring and evaluation of the various aspects of a project, service, or facility to ensure that standards of quality are being met. In simple business terms, quality assurance is the difference between success and failure. If you believe in the idea of "quality in, quality out," and you want to play a vital role in helping an organization achieve success through quality, LTC's Quality Process Improvement technical diploma is the way to get you started in this field.

PROGRAM OUTCOMES

- Provides basic understanding of total quality control concepts, inspection methods, data collection, application of sampling plans, quality cost, and quality audits.
- Utilize mathematical calculations, including metric conversions, geometry, trigonometry, and basic and advanced statistical process control techniques.
- Provides basic understanding of Lean Six Sigma concepts of continuous improvement and provides you with the basic skills to appy these principles.
- Provides basic understanding of quality systems used currently in industry. These systems include, ISO 9000, Malcolm Baldridge, and Deming Prize.
- Assist in the planning of quality audits to assure quality systems are working and take corrective action through continuous improvement.

CAREER AND EDUCATION ADVANCEMENT OPPORTUNITIES

LTC credits transfer to over 30 universities. For more information visit gotoltc.edu/future-students/transfer.

ADMISSION TO DO'S

- Work with Career Coach to:
 - Submit application and $30 fee.
 - Submit official transcripts (high school and other colleges).

PROGRAM TO DO'S

- Work with Academic Advisor to:
 - Complete an assessment for placement (Accuplacer or ACT).
 - Complete Functional Abilities Statement of Understanding form.
 - Meet to plan your first semester schedule, review your entire plan of study, discuss placement assessment results and complete Program To Do's.

APPROXIMATE COSTS

- $134.20 per credit tuition (WI resident) plus $7.38 per credit student activity fee. $10 per credit online fee. Material fee varies depending on course. Other fees vary by program. Visit gotoltc.edu/financial-aid/tuition-and-fees for details.

FINANCIAL AID

This program is eligible for financial aid. Visit gotoltc.edu/Financial-Aid or talk with your Career Coach about how to apply for aid.

SPECIAL NOTE

This credential, the Quality Process Improvement technical diploma, is part of the quality assurance career pathway and can serve as a step to the higher credential, the Quality Assurance Technician Associate Degree. The associate degree provides further in-depth training in quality, management, and in "soft" skills.

CONTACT

LTC Career Coach
920.693.1162 • CareerCoach@gotoltc.edu

Catalog No.	Class Title	Credit(s)
Term 1		
10623101	Quality Concepts	3
10623110	Lean Six Sigma - Measure and Analyze	4
10623111	Lean Six Sigma - Improve & Control	4
10809196	Introduction to Sociology OR 10809122 Introduction to American Government (3 cr)	3
		14
Term 2		
10623112	Lean Six Sigma - Implementation	3
10623193	ISO 9001 Internal Auditor OR 10623195 ISO 9001 Concepts (3 cr)	3
10623118	Lean Manufacturing Overview	3
10801195	Written Communication OR 10801136 English Composition 1 (3 cr)	3
		12
		TOTAL 26

Curriculum and Program Acceptance requirements are subject to change. Program start dates vary; check with your advisor for details. The tuition and fees are approximate based on 2018-2019 rates.

INTRODUCTION TO SOCIOLOGY...introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

ISO 9001 INTERNAL AUDITOR...is designed to introduce participants to the current QS/ISO 9001 and ISO 19011 standards. The course is structured to provide a detailed review of the standards, how to document procedures, and how to perform audits. Students will practice preparation for and conducting audits in a local business. Successful completion of this course qualifies the student to receive the ISO 9001 Internal Auditor certificate (19-623-8)

LEAN MANUFACTURING OVERVIEW...expands the learner's ability to develop skills to prioritize and sequence work, execute work plans, implement controls, and create and analyze performance evaluations. It allows the student to explore the execution of quality initiatives and continuous improvement plans in addition to the control and handling of inventories.

LEAN SIX SIGMA - IMPLEMENTATION...introduces the student to the implementation of a six sigma project. Students apply the techniques used in prior Lean Six Sigma courses to a real problem in their place of employment. An emphasis is placed on team skills required to successfully implement the project. Skills demonstrated include project initiation, time management, and constraint management. Student final projects demonstrate their mastery of both DMAIC and Lean methodologies. PREREQUISITE: 10623111 Lean Six Sigma-Improve & Control

LEAN SIX SIGMA - IMPROVE & CONTROL...provides the student with the skills and tools to select and implement solutions to solve problems and improve processes. An emphasis is placed on the use of statistical techniques in solution selection including correlation, regression, and statistical process control. Lean manufacturing methods including SMED, POUS, cellular manufacturing, mistake proofing, TPM, 5S and visual management are practiced. Students learn how to create a control plan. MiniTab skill expansion is included. COREQUISITE: 10623110 Lean Six Sigma -Measure & Analyze

LEAN SIX SIGMA - MEASURE AND ANALYZE...provides the student with skills and tools to collect and analyze data to solve problems and improve processes within an organization. Various techniques for process mapping are explored including SIPOC, FMEA, VSM, standard work sheets, and spaghetti diagrams. Statistical tools are explored including probability, confidence intervals, measurement systems analysis, hypothesis testing, and TAKT time analysis to create and implement a data collection plan. MiniTab introduction is included.

QUALITY CONCEPTS....provides an overview of quality systems, methods and analysis using Minitab software. Basic quality philosophies such as Deming's principles, continuous improvement, quality costs, supplier relations and inspection theory will be presented. The components of a basic quality system compatible with ISO 9000 and Six Sigma will be explored. Minitab software will be taught and utilized to collect and analyze data. Techniques such as pareto, trend analysis, histograms, cause and effect diagrams and corrective/preventive action techniques will be applied to the data in order to address problems and improve processes.

WRITTEN COMMUNICATION...teaches the writing process, which includes prewriting, drafting, revising, and editing. Through a variety of writing assignments, the student will analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Keyboarding skills are required for this course. It also develops critical reading and thinking skills through the analysis of a variety of written documents. PREREQUISITE: 10831103 Intro to College Wrtg equivalent and COREQUISITE: 10838105 Intro Rdg & Study Skills or equivalent