

**Program Number 10-623-5**  
**Associate Degree in Applied Science**
**ABOUT THE PROGRAM**

Manufacturing Management is a unique associate degree program designed by local industry to meet the needs of the workplace through a combination of supply chain, quality, lean, leadership, and supervisory skills. Graduates of this program are prepared to provide leadership in manufacturing and service industries.

**PROGRAM OUTCOMES**

- Plan the operations of a business across functional areas.
- Organize resources to achieve the goals of the organization
- Direct individuals and/or processes to meet organizational goals.
- Control business processes.

**CAREER AND EDUCATION ADVANCEMENT OPPORTUNITIES**

LTC credits transfer to over 30 universities. For more information visit [gotoltc.edu/future-students/transfer](http://gotoltc.edu/future-students/transfer).

**ADMISSIONS AND FIRST SEMESTER ENROLLMENT STEPS**

- Submit online application.
  - Complete the online Student Success Questionnaire.
  - Schedule a Program Counseling Session with your assigned program counselor to plan your first semester schedule, review your entire plan of study, discuss the results of the Student Success Questionnaire.
- \*Submit transcripts and test scores (optional, highly recommended): College transcripts, along with high school transcripts and test scores from within the last five years, used for course registration. Official transcripts needed for transferring college credit(s) and for financial aid purposes.*

**APPROXIMATE COSTS**

- \$138.90 per credit tuition (WI resident) plus \$8.33 per credit student activity fee. Material fee varies depending on course. Other fees vary by program. Visit [gotoltc.edu/financial-aid/tuition-and-fees](http://gotoltc.edu/financial-aid/tuition-and-fees) for details.

**FINANCIAL AID**

This program is eligible for financial aid. Visit [gotoltc.edu/Financial-Aid](http://gotoltc.edu/Financial-Aid) or talk with your Admissions Advisor about how to apply for aid.

**CONTACT**

LTC Admissions Advisor  
 920.693.1162 • [Admissions@gotoltc.edu](mailto:Admissions@gotoltc.edu)

Catalog No.	Class Title	Credit(s)
<b>Term 1 (Fall 2021)</b>		
10809195	Economics	3
10804123	Math with Business Applications	3
10196189	Teambuilding & Problem Solving	3
10103191	Word - Level 1	1
10182131	Supply Chain Management	3
10103121	Excel - Level 1	1
		<b>14</b>
<b>Term 2 (Spring 2022)</b>		
10809198	Introduction to Psychology	3
10623195	ISO 9001 Concepts	3
10196107	Principles of Management	3
10196188	Project Management	3
		<b>12</b>
<b>Term 3 (Summer 2022)</b>		
10801195OL	Written Communication	3
		<b>3</b>
<b>Term 4 (Fall 2022)</b>		
10806112	Principles of Sustainability	3
10101155	Accounting for Professionals	3
10623118	Lean Manufacturing Overview	3
10105128	Personal Branding	2
		<b>11</b>
<b>Term 5 (Spring 2023)</b>		
10623110	Lean Six Sigma - Measure and Analyze	4
10623123	Blueprint Reading and Metrology	3
10623101	Quality Concepts	3
10196134	Legal Issues for Supervisors	3
		<b>13</b>
<b>Term 6 (Summer 2023)</b>		
10801196	Oral/Interpersonal Communication	3
		<b>3</b>
<b>Term 7 (Fall 2023)</b>		
10449114	Safety in the Workplace	3
10196129	Portfolio Assessment-Manufacturing Management	1
		<b>4</b>

**TOTAL 60**

**ACCOUNTING FOR PROFESSIONALS**...is the study of the information that can be interpreted from financial statements. Students analyze financial statements and apply managerial accounting concepts in an accelerated format. PREREQUISITE: 10804123 Math w Business Applications or CONDITION: 101101 Paralegal program requirements met

**BLUEPRINT READING AND METROLOGY**...provides knowledge and skill in the understanding of quality measurement, quality measurement devices and their proper application. Quality measurement topics include precision, accuracy, control of variation, gage R/R, calibration techniques and blueprint/specification reading. The quality measurement devices portion of this course provides hands-on use of common measurement and test equipment.

**ECONOMICS**...provides the participant with an overview of how a market-oriented economic system operates, and it surveys the factors which influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. COREQUISITE: 10838105 Intro to Reading and Study Skills or Reading placement assessment equivalent or CONDITION: 610062 Agribusiness/Financial Basic program admissions met

**EXCEL - LEVEL 1**...introduces the student to spreadsheet features such as creating, saving, editing, navigating, formatting worksheets; entering formulas and functions; working with charts; and developing multiple-sheet workbooks.

**INTRODUCTION TO ETHICS: THEORY AND APPLICATION**...provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives will be used to analyze and compare relevant issues. Students will critically evaluate individual, social and/or professional standards of behavior, and apply a systematic decision-making process to these situations. COREQUISITE: 10838105 Intro Reading and Study Skills or Reading placement assessment equivalent

**INTRODUCTION TO PSYCHOLOGY**...introduces students to a survey of the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. PREREQUISITE: Reading placement assessment equivalent or COREQUISITE: 10838105 Intro to Reading and Study Skills

**ISO 9001 INTERNAL AUDITOR**...is designed to introduce participants to the current ISO 9001 standard. 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 - 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.

**LEGAL ISSUES FOR SUPERVISORS**...applies the skills and tools necessary for a supervisor to effectively function in today's legal work environment. Learners will demonstrate the application of legal practices in both union and nonunion environments, analysis of the impact of U.S. employment laws, the impact of the global economy, the appeal process, reacting to legal charges, documenting the hiring/firing process, dealing with harassment issues, privacy issues, and summarizing legal issues facing contemporary supervisors.

**MATH WITH BUSINESS APPLICATIONS**...covers real numbers, basic operations, linear equations, proportions with one variable, percents, simple interest, compound interest, annuity, apply math concepts to the purchasing/buying process, apply math concepts to the selling process, and basic statistics with business/consumer applications. PREREQUISITE: 10834109 Pre-Algebra or Math placement assessment equivalent and COREQUISITE: 10838105 Intro to Reading and Study Skills or Reading placement assessment equivalent or CONDITION: 610061 Agribusiness/Agronomy Basic program admissions requirements met

**ORAL/INTERPERSONAL COMMUNICATION**...provides students with the skills to develop speaking, verbal and nonverbal communication, and listening skills through individual speeches, group activities, and other projects. COREQUISITE: 10838105 Intro Reading and Study Skills or Reading placement assessment equivalent

**PERSONAL BRANDING**...focuses on the importance of developing a strong brand identity for yourself as a professional. As a prospective employee, you are constantly selling yourself from how you talk, walk, dress, your facial expressions, and your body language; people are always forming impressions of you. In this course, you will develop a professional resume, cover letter, practice interview skills, and learn the role of social media in career development.

**PORTFOLIO ASSESSMENT-MANUFACTURING MANAGEMENT**...prepares the student to identify what they have learned throughout the program, write career goals, re-examine their resume, research and collect project samples of their achievements, and analyze their achievements within the college core abilities. PREREQUISITE: 10105128 Personal Branding

**PRINCIPLES OF MANAGEMENT**...will enable students to develop short and long range plans to effectively accomplish organizational goals. Through the use of terminology, exercises, and case studies, students will be able to give a critical appraisal of real life situations involving organizing, staffing, and motivating others. The student will also learn tools to aid in problem solving, value in diversity, and coping with change.

**PROJECT MANAGEMENT**...introduces the learner to explore the relationship of existing and emerging processes and technologies to manufacturing strategy and supply chain-related functions. This course addresses three main topics: aligning resources with the strategic plan, configuring and integrating operating processes to support the strategic plan, and implementing change.

**QUALITY CONCEPTS**...provides an overview of quality systems, methods and analysis. 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. 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.

**SAFETY IN THE WORKPLACE**...applies the skills and tools necessary to provide a safe and secure work environment. Each learner will demonstrate the application of safety awareness, federal/state/local compliance, incident investigation and documentation, human relations techniques, safety orientation, inspections, and risk analysis, issues of workplace violence, substance abuse, and health hazards, first aid and CPR, fire and electrical safety, emergency preparedness, and liaison with external agencies.

**SUPPLY CHAIN MANAGEMENT**...has been developed to provide a basic understanding of the planning and control of materials into, through, and out of organizations. In addition, those who want to become certified by APICS need a fundamentals course to learn about the material planning and control system. This course will provide a basis for further study leading to certification.

**TEAMBUILDING AND PROBLEM SOLVING**...applies the skills and tools necessary to facilitate problem solving in a team environment. Each learner will demonstrate the application of the benefits and challenges of group work, necessary roles in a team, stages of team development, different approaches to problem solving, consensus, a systematic process of problem definition, data acquisition, analysis, developing alternative solutions, solution implementation, and evaluation.

**WORD - LEVEL 1**...introduces the student to word processing features such as creating, saving, editing, navigating, and formatting the content of multi-page documents.

**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 or Writing placement assessment equivalent and COREQUISITE: 10838105 Intro to Rdg & Study Skills or Reading placement assessment equivalent