

# MANUFACTURING MANAGEMENT

Catalog No. Class Title

# Program Number 10-623-5 Associate Degree in Applied Science • Four Terms

### **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**

- · Display respect for individual differences and work cooperatively to build rapport and to achieve team goals.
- · Develop and manage teams to enhance work productivity.
- · Manage quality control.
- · Implement better decision-making skills and utilize successful problem-solving processes.
- Perform successfully in the supervisory roles of planning, organizing, staffing, leading, and controlling.
- Integrate technology into the supply chain to improve profitability.
- Provide an uninterrupted flow of materials, supplies, and services required to operate the organization.
- Analyze and negotiate contracts with suppliers, manufacturers, and/or distributors.

### CAREER AND EDUCATION ADVANCEMENT OPPORTUNITIES

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

# **PROGRAM ADMISSIONS STEPS**

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

#### **ENROLLMENT PROCESS**

After you are admitted to your program you will meet with your Advisor to plan your first semester schedule, review your entire plan of study, discuss placement assessment results and complete any additional enrollment requirements. Enrollment requirements for this program's courses include:

- Complete an assessment for placement (Accuplacer or ACT).
- Complete Functional Abilities Statement of Understanding form.
- Meet with your program's advisor.

#### **APPROXIMATE COSTS**

- \$140 per credit (resident)
- Other fees vary by program (books, supplies, materials, tools, uniforms, health related exams, etc.) 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.

#### CONTACT

LTC Career Coach 920.693.1162 · CareerCoach@gotoltc.edu

10103131 10103181 10182131 10196189 10809166 10801195	Term 1 Excel 2013 - Level 1 Word 2013 - Level 1 Supply Chain Management Teambuilding & Problem Solving Intro to Ethics OR 10809172 Intro to Diversity Studies Written Communication OR 10801136 English Composition 1	1 1 3 3 3 3	
		14	
	Term 2		
10804123 10196107 10801196	Math with Business Applications Principles of Management Oral/Interpersonal Communications OR 10801198 Speech	3 3 3	
10196134 10623118	Legal Issues for Supervisors Lean Manufacturing Overview	3 3	
		15	
	Term 3		
10101155 10105128 10196136 10196188 10623101 10806112	Accounting for Professionals Personal Branding Safety in the Workplace Project Management Quality Concepts Principles of Sustainability OR 10809122 Introduction to American Government	3 2 3 3 3 3 3	
	Term 4		

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10196129	Portfolio Assessment	1
10809198	Introduction to Psychology OR 10809188	3
	Developmental Psychology	
10623110	Lean Six Sigma - Measure and Analyze	4
10623193	ISO 9001 Internal Auditor OR 10623195	3
	ISO 9001 Concepts	
10809195	Economics	3
		14

**TOTAL 60** 

Credit(s)

Curriculum and Program Acceptance requirements are subject to change. Program start dates vary; check with your advisor for details.





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

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 Reading and Study Skills or equivalent

**EXCEL 2013 - LEVEL 1**...introduces the student to creating, modifying and formatting worksheets; entering formulas and functions; working with charts; and developing multiple-sheet workbooks. This course is offered in a self-paced format.

**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. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

**INTRODUCTION TO DIVERSITY STUDIES**...introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, religion are explored. 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 - 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.

**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 equivalent and COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

**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 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.

PRINCIPLES OF SUSTAINABILITY...prepares students to develop sustainable literacy, analyze interconnections among physical and biological sciences and environmental systems, summarize effects of sustainability on health and well-being, analyze connections among social, economic, and environmental systems, employ energy conservation strategies to reduce use of fossil fuels, investigate alternative energy options, evaluate options to current waste disposal/recycling in the U.S., and analyze approaches used by your community.COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

**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 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 ISO9000 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.

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 2013 - LEVEL 1...introduces the student to word processing features such as creating, saving, editing, formatting, and printing documents, creating basic diagrams, and applying these concepts to produce usable documents. This course is offered in a self-paced format.

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

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