ABOUT THE PROGRAM
Times are changing in the field of maintenance. Facilities are running with both manual and automated equipment and both need to be maintained and repaired. If you like to troubleshoot, work with your hands, and have an interest in math and electrical and mechanical processes, a career in maintenance is for you. Your expertise and knowledge is needed in today’s modern, automated facilities.

PROGRAM OUTCOMES
• Demonstrate safe work procedures.
• Install industrial equipment and systems.
• Maintain industrial equipment and systems.
• Troubleshoot industrial equipment and systems.
• Repair industrial equipment and systems.
• Communicate technical information.

CAREER AND EDUCATION ADVANCEMENT OPPORTUNITIES
LTC credits transfer to over 30 universities. For more information visit gotoltc.edu/future-students/transfer.

ADMISSION AND PROGRAM ENROLLMENT STEPS
- Submit online application.
- Submit transcripts (high school & other colleges). NOTE: Official transcripts required for acceptance of transfer credits; Financial Aid may require.
- Complete the online Student Success Questionnaire.
- Schedule a Program Advising Session with your assigned advisor to plan your first semester schedule, review your entire plan of study, discuss the results of the Student Success Questionnaire.

APPROXIMATE COSTS
• $136.50 per credit tuition (WI resident) plus $8.10 per credit student activity fee. $10 per credit online or hybrid 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
Students need to supply their own safety glasses and welding gloves.

RELATED PROGRAMS
• Electro-Mechanical Automation Technology
• Millwright Apprenticeship
• Industrial Electrician Apprenticeship
• Maintenance Technician Apprenticeship

CONTACT
LTC Career Coach
920.693.1162 • CareerCoach@gotoltc.edu

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 2019-2020 rates and are subject to change prior to the start of the academic year.
LATHES 1...introduces the student to the characteristics and attributes of turning tools: follow proper turning operations, perform turning operations. COREQUISITE: 10462107 Tools and Measurement or PREREQUISITE: 31463235 Maintenance Tools and Measurement and PREREQUISITE: 10462104 Machine Tool Intro or 31463204 IM Machine Tool Intro

LAYOUT AND RIGGING...prepares the learner to perform layout skills for industrial maintenance to include machine layout, proper rigging, installation, and leveling with emphasis on baseline layout, machine rigging and installation, machine leveling, and alignment procedures. Participants will obtain lift truck operation certification upon completion. COREQUISITE: 31463209 Ind Mntc Intro and COREQUISITE: 10804113 College Tech Math 1A and COREQUISITE: 10462111 Maintenance Print Reading or PREREQUISITE: 31463288 IM Print Reading

MACHINE TOOL INTRODUCTION...prepares the learner with the skills to identify basic turning, boring, and facing processes, follow standard shop safety rules, use semi-precision and precision measuring tools, perform workpiece layout procedures, identify metal composition and classification, follow cutoft machine safety rules, operate vertical and horizontal cutoft machines, follow sensitive drill press safety rules, identify drill press components, interpret attributes of hole-producing tools, and operate a sensitive drill press.

MAINTENANCE INTRODUCTION...prepares the learner to apply basic safety, mechanics, force, friction, work, and energy; learn terminology related to maintenance; introduction to threaded and non-threaded fasteners and concrete anchoring; learn to use precision measuring tools,introduction to single-phase and three-phase motor wiring. PREREQUISITE: 31463235 Maintenance Tools and Measurement or COREQUISITE: 10462107 Tools and Measurement

MAINTENANCE PRINT READING...prepares the learner to read prints; make isotropic Tooling calculations. COREQUISITE: 10462107 Tools and Measurement

MILLS 1...prepares the learner to identify vertical milling machine components, select cutting tools and workholding device(s), apply safety rules, set up the vertical milling machine, and mill various surfaces. COREQUISITE: 10420103 Lathes 1 or PREREQUISITE:31420395 IM Machine Tool Laths and Mills

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

POWER TRANSMISSION...introduces the learner to belt, chain, and gear drives used in industrial maintenance applications, including v-belts, flat belts, timing belts, conveyor chains, roller chains, bevel gears, worm gears, helical gears, spur gears, couplings, and alignment with emphasis on identification, installation, repair, and maintenance. COREQUISITE: 10462119 Bearings and Lubrication

PROGRAMMABLE CONTROLLERS - ALLEN BRADLEY...prepares the student to understand basic PLC structure and terminology; learn to create and troubleshoot basic PLC and functional block diagrams. COREQUISITE: 10838107 Programmable Logic Control and Process Systems

ROBOTIC MAINTENANCE...prepares the learner to understand basic PLC structure and terminology; learn to create and troubleshoot basic PLC and functional block diagrams. COREQUISITE: 10838107 Programmable Logic Control and Process Systems

ROBOTICS INTRODUCTION...introduces the student to robotic axises, movement control, navigating the teach pendant, robotic frames, basic programming commands such as condition branching, wait and call instructions. This class qualifies for 48 hours of Continuing Education Units (CEUs) for Electricians. This class qualifies for 64 hours of Continuing Education Units (CEUs) for Electricians.

ROBOTIC MECHANICAL MAINTENANCE...introduces the students to the robot teach pendant and robot jogging. Students will be taught to replace servo motors, recalibrate the robot and re-robot software and programs.

ROBOTIC TOOLS AND MEASUREMENT...introduces the student to use hand tools, precision measuring instruments, and torque tools.

TROUBLESHOOTING AND MACHINE REPAIR...prepares the learner to perform essential troubleshooting, repair, and preventive maintenance of various machine tools and installations used in industrial maintenance and to integrate the skills learned in the other maintenance courses to perform complete repair of machine tools. COREQ: 10462119 Power Transmission, 10462123 Pumping and Plumbing and PREREQ: 10502112 Ind Wiring

WELDING INTRODUCTION...introduces the learner to the world of welding, weld shop safety practices, welding terminology, and welding machine setup to industry standards. Learners will be introduced to the three major welding processes: SMAW, GTAW, and GMAW and will build skills welding with each process in the flat, and horizontal positions while using the common welding joints found in industry. This class will teach the basics of welding material using the two major hand held cutting processes - the Oxyfuel and PFC cutting processes

WRITTEN COMMUNICATION...teaches the writing process, which includes prewriting, drafting, revising, and editing. Through a variety of writing assignments, the student will analyze, segment, and identify audience, purpose, point of view, genre, and effective writing techniques 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. PREREQ: 10831103 Intro to College Wrtg or Writing placement assessment equivalent and COREQUISITE: 10838105 Intro Rbg & Study Skills or Reading placement assessment equivalent