



Thompson
M-TEC
Career and Corporate Training

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Corporate Training
Catalog

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Welcome

Patrick A. Thompson Michigan Technical Education Center (M-TEC), a service of Ottawa Area ISD, provides customizable, flexible, and affordable career and corporate training for adult students and businesses.

Whether it's time to start a new career or improve your current skills and advance to the next level in your field, we can get you there quickly.

For employers who seek customized training for their employees, Thompson M-TEC staff delivers high quality, outcomes-based training onsite or at your place of business. Training is convenient, personalized, and affordable. We continually evaluate and expand all our educational offerings based upon industry needs and educational data.

Please contact us with any questions. We are here to help!

Courses:

With over 100 course offerings, Thompson M-TEC has something for everyone. Our courses can assist you in improving your current skills or provide you with new skills to launch a career.

Online:

Online classes give you the flexibility to design your own schedule while learning the skills necessary to acquire professional level positions for many in-demand occupations. We offer over 200 online classes through Education 2 Go (ed2go), the industry leader in affordable online learning.

Training and Certification:

Thompson M-TEC is the lakeshore location for training, certification, and assessments. We are a certified ETA and Pearson VUE testing facility.

For Businesses:

Whether an employee needs assistance in learning a new skill, or if you are an employer who needs to bring your staff up to speed in the latest technical skills, Thompson M-TEC can help. Through our Corporate Training Institute, we offer customized training to meet your immediate needs. Your employees will get rapid results. Let Thompson M-TEC help bring your team's skills to the next level.

SOFTWARE TECHNOLOGY

AutoCAD I

This course covers the essential core topics for working with AutoCAD, starting with the basic tools that enable the student to create and edit a simple drawing and ending with the use of sophisticated AutoCAD techniques. Students will become familiar with the command line (like DOS interface) and the menu bar (point and click interface). (KS)

AutoCAD II

This course is designed to provide an understanding AutoCAD from simple fundamentals to advanced design. Course topics include basic commands, using layers, inserting blocks, editing drawings and text and dimensioning. (KS)

Computer Literacy

This course is designed to provide the skills in computer basics and office software applications. The course provides an understanding of computer hardware, file structure and office applications. Course topics include computer hardware, screen navigation, file management, and office applications including Word, Excel and PowerPoint.

Crystal Reports

participants will build basic list and group reports that work with almost any database. This course is designed for a person who needs output from a database. In some cases, database programs have limited reporting tools, and/or they may not have access to those tools. Participants may or may not have programming and/or SQL experience. (MG)

Excel Basic

This course provides thorough introductory training of Excel. This course covers beginning-level skills, and is ideal for the newer computer user who wants to become well versed in Excel. Topics introduced include the ribbon interface; entering and editing data; selecting cells and ranges; printing worksheets; creating formulas and functions; formatting cell contents; inserting and deleting columns, rows, and cells; charts; and more. After completing this course, students can successfully face the challenges presented in the Excel Intermediate Training Course.

Excel Intermediate

This course provides thorough mid-level training of Excel. This text covers more complex skills than those presented in the Excel Basic course, but with the same proven instructional design. Topics introduced include large worksheets and workbooks; tables; outlines; inserting clip art, pictures, and SmartArt; templates; digital signatures; and more. After completing this course, students can successfully face the challenges presented in Microsoft Excel Advanced.

Excel Advanced

This course provides thorough advanced training of Excel. This course provides more complex skills than those present in the Excel Intermediate course, but with the same proven instructional design. This advanced course will challenge students. Topics introduced include PivotTables and macros, financial functions, data analysis, auditing and additional functions, advanced formatting and analysis tools, collaboration, and more. The course concludes with an integration lesson.

Intro to Computers

Learn to navigate Windows Explorer; create, save, and print documents; work with the task bar and folders; use the desktop; explore the Internet; and cover many other features.

JMP

JMP is the data analysis tool of choice for hundreds of thousands of scientists, engineers and other data explorers worldwide. Users leverage powerful statistical and analytic capabilities in JMP to discover the unexpected. JMP helps tackle your routine and difficult statistical problems. From easily accessing your data from various sources, to using quick, reliable data preparation tools, and performing choice statistical analyses. (MG)

MasterCAM

This course teaches participants how to use MasterCAM software to create 2D or 3D geometry and CNC programs, the navigation of the menus, importing/exporting of files, drawing functions, toolpath creations and posting options. (MH)

Microsoft Outlook

Learn to use Microsoft Outlook. Topics covered include an introduction to Outlook and its main components, sending and receiving messages, working with email attachments, working with contact information, the calendar, notes, tasks, the Outlook journal, and more. Students will learn how to read, create, send, and forward e-mail messages.

PowerPoint

In this class, you will explore the many features of PowerPoint by developing a presentation. You will create tables, charts, and SmartArt graphics incorporating them into a presentation. Expand your PowerPoint knowledge by customizing the colors and effects of your presentation. Animate and utilize multi-media effects within it, create themes and slide masters, integrate your presentation with other programs, and prepare it for delivery.

Project Based Learning – Focused Results

Learn to utilize the Microsoft Office Suite, QuickBooks, and other computer applications to make a great impression. Sometimes the task demands that you go beyond your basic understanding of the software and more fully utilize fewer familiar capabilities. We created this special service just to make sure that your project hits the mark. Our experts facilitate your successful completion of a special project. We will make sure that you are able to make the most of the capability of the right software; and when appropriate, we will show you how to use various programs together in order to get the best result. Learn what is most applicable to you in your current project rather than all of the details of every program.



SOLIDWORKS Introduction

This course is for students to evaluate knowledge before taking a SOLIDWORKS Essentials class, or to gain a cursory knowledge of SOLIDWORKS. In this class, you will be generating basic details, making edits, learning how to do a design review, and inspecting dimensions. This class will give you an insight of what you can expect if you decide to take the next step, and enroll in our SOLIDWORKS Essential class, which will provide a more detailed, working knowledge of SOLIDWORKS, and the ability to start designing professionally.

SOLIDWORKS Essentials

This SOLIDWORKS Essentials course teaches you how to use the SOLIDWORKS mechanical design automation software to build parametric models of parts and assemblies, and how to make drawings of those parts and assemblies.

SOLIDWORKS, Weldments and Sheet Metal

In this course, Students will understand the concepts of SOLIDWORKS sheet metal and weldments. Learning to create sheet metal parts such as brackets, square to rounds, guarding, etc. with flat patterns. Learn weldments, leverage 3D sketching for structural profiles. Learn to generate drawings and other manufacturing documentation, along with many other topics in this SOLIDWORKS course.

SOLIDWORKS CAM

This SOLIDWORKS CAM Introduction course, designed to teach students the essentials of SOLIDWORKS CAM will highlight the basic features and identify parts of the program. Students will learn stock Set-up and Automatic Feature Recognition (AFR), Manual 2.5 Axis Features, Generate and Edit Path, custom Strategies, posting, and technology database. Course participants will learn tasks to interface and set-up SOLIDWORKS CAM. They will also learn basic features and custom strategies.

Minitab 17

This Minitab 17 course provides participants hands on opportunity to experience the power and utility of this software program. Use the Assistant, create graphics, compute basic statistics, understand regression, analyze variances, understand statistical process control, use process capability, use measurement systems analysis, and design experiments. (MG)

ADVANCED MANUFACTURING AND SKILLED TRADES

ABB Robot Operations

This course provides participants with the ability to program and operate an ABB robot. The course is a combination of lecture and hands-on training and is custom-tailored to a specific software, controller, and robot. Identification of the software and controller is needed prior to training. Upon completion of this module the trainees will have the knowledge and skills to safely program and operate an ABB industrial robot. (MH)

Motor Controls and Drives

This course is designed to provide basic skills in motor control. Participants will learn how motor control circuits operate and gain an understanding of AC / DC motor operations, control circuit components, motor control wiring, connections, ladder diagrams, and interpretation of electronic motor control schematics. (MH)

Allen-Bradley RSLogix 5000 – Basic PLC

This Forty (40) hour course is designed to familiarize participants with the Rockwell RSLogix PLC programming. This course will provide learners with the fundamentals needed to create, transfer, test and verify working RSLogix projects. The uses of Ladder logic are explained. The concept of ladder logic using tags and datatypes instead of data tables will be applied. Participants will go online with controllers and edit ladder routines online and offline. (MH)

Allen-Bradley RSLogix 5000 - Intermediate PLC 1

This course is designed to allow participants to program, test and verify a wide range of PLC programs. The course provides learners with the ability to monitor, edit, and create programs and routines online and offline using RSLogix projects. (MH)

Allen-Bradley ControlLogix 5000 Intermediate 2

This course is designed to allow participants to build, test and verify a PLC program given the I/O table, sequence of operation, location of components and an understanding of station tasks. This course will challenge participants to write and design solutions to given problems. (MH)

Allen-Bradley PLC Troubleshooting

This course is designed to train the participant how to work with inoperable stations, identify problems, and troubleshoot solutions on Rockwell RSLogix PLC programmed systems. Participants learn to use troubleshooting tools, fault codes, alarm messages, and the fault indicators to determine and correct the problem. (MH)

AWS (American Welding Society) Welding Certification

This is a practical welding assessment covering AWS Welding; there is no classroom time. The first hour will be dedicated to instruction in safety and review of the applicable Welding Procedure Specification (WPS) governing the assessment. You will have a chance to familiarize yourself with the machine and the settings. (JD, NP, MW)

Automated Systems Troubleshooting -Capstone

Advanced PLC, Electrical Fundamentals, Robot Operation & Programming (or equivalent experience). This course covers system level training and integration fundamentals. Course topics include electrical schematics combined with integrated PLC, mechanical systems, fluid power systems and welding systems. (MH)

Electrical Fundamentals

This course covers the basics of DC (direct current) and AC (alternating current) theory and fundamentals. Course topics include concepts of electrical schematics, components, voltage, current and resistance. Ohms Law is used extensively to verify the results obtained from the outcomes of the lab experiments. Power supplies and test equipment like the digital volt Ohm meter will be operated to make observations of circuit parameters and operation. (MH)

Electronic Sensors

This course introduces participants to the most common types of sensors and boundary ranges of sensors. Participants learn adjusting and alignment, sinking and sourcing along with NPN and PNP types of sensors. Labs include application of terminology, schematic symbols, and methods of bench testing a wide range of sensors. (MH)

Programming & Set-up for CNC Milling Machines

This course is designed to provide a basic understanding of CNC programming and set-up of a CNC Milling Machine. Upon completion of this module the trainees will have knowledge of the proper structure and execution of CNC milling programs. Trainees will be able to upload programs, load tooling, make tool and fixture offsets and run a CNC program. This module will include a hands component on a CNC vertical machining center. (MH)

Programming and Set-up for CNC Lathe

This course is designed to provide a basic understanding of CNC programming and set-up of a CNC Lathe. Upon completion of this module the trainees will have knowledge of the proper structure and execution of CNC Lathe programs. Trainees will be able to upload programs, load tools, make tool offsets and run a CNC program. This module will include a hands component on a CNC Lathe. (MH)

Carpentry

This course is designed to provide a basic understanding of the safe use and maintenance of portable hand and power tools used in the carpentry and building maintenance occupations, as well as basic construction concepts such as walls and floors. Students will practice basic construction techniques using powered and non-powered tools. (MH)

Corrosion Test Chamber

This course provides classroom, per group, and hands-on learning designed to instruct the student learners on the operation and maintenance of the Singleton and Harshaw Corrosion Test Chamber. (SC)

Digital Electronics

This course covers the fundamentals of digital electronics and troubleshooting digital circuits. Course topics include logic gates, Boolean expressions, schematics for logic gates, inverters, and amplifiers, digital electronic circuits and troubleshooting analysis. (MH)

Electrical Print Wiring Harness

This course covers the basic safe electrical fundamentals print reading and safely understanding electricity. The student will first gain an understanding of the safety and concepts of reading electrical schematics, components, voltage, current and resistance. This course will provide an understanding on how to apply these fundamentals. (MH)

Electrical Print Reading

In this course participants learn basic electrical concepts, safety, electrical schematics, components, voltage, current and resistance. Students apply knowledge by learning to safely operate a digital multi-meter, incorporate power supplies and use scope meter in accordance with NFP70E codes. (MH)

Electricity and Electronics for HVAC Technicians

This course covers basic electricity and basic electronics related to the needs of air conditioning and refrigeration technicians. The course covers practical circuits and systems.

In the recent past, there has been an increase in the importance of electricity and electronics in the control and protection of air conditioning and refrigerated devices. This course covers electrical concepts thoroughly, including the more complex circuits and problems that you will encounter in the field. (MH)

Equipment Leveling and Alignment

This course is designed to provide the necessary skills needed to identify components and demonstrate best practices used in manual laser leveling and alignment. The students will learn various leveling and alignment techniques and practice leveling and aligning different components. This course is designed to provide practical hands-on training for maintenance technicians who have no or limited background in this area of service (Not intended for a journeyman millwright). (MH)

Food Grade Stainless TIG Welding

The GTAW welding course will familiarize the student with the basic principles of inert gas and purge welding using TIG welder. The course will provide basic skills using TIG welder on 304 and 316 stainless tubing, a variety of joints in the flat position on up to ½” bar stock and 10 to 18-gauge sheet metal. This forty (40) hour course incorporates lecture and hands-on exercises. (MW)

Geometric Dimensioning & Tolerancing (GD&T) (for Machinists)

This course will provide students with fundamentals of the Geometric Dimensioning and Tolerancing (GD&T) system. The course includes providing knowledge on the correct interpretation and application of each symbol, the rules, datum, orientation, location, and profile. Emphasis is placed on interpreting detailed drawings and the communication skills required in CNC work. (MH)

Geometric Dimensioning & Tolerancing (GD&T) 102 - 103/4

This course is designed to be customized at levels ranging from Fundamentals of GD&T to Specifying GD&T. GD&T 102 will assist the users of engineering drawings that contain GD&T symbols and terms. This course is an excellent starting point for individuals new to GD&T and is highly recommended as a refresher course for those with limited past exposure to ASMEY14.5. (CF)

GD&T 103 is designed for the creators of product engineering drawings the Engineers, Designers, and Drafters. Participants in this course, including experienced users of GD&T, are encouraged to have already completed previous courses on GD&T. (CF)

GMAW Welding

This course will familiarize the student with the basic principles of GMAW (Gas Metal Arc Welding), using MIG welder. The course will provide basic skills using MIG welder on mild steel and positions. The course incorporates both lecture and hands-on exercises. (MW)

GTAW Welding

This course is designed to provide the skills in GTAW welding. The course provides an understanding of safe welding practices and welding equipment setup and operation. Course topics include safety, equipment setup, and GTAW welding. (MW)

HMI Programming

This course is designed to provide the skills in HMI fundamentals. The course provides an understanding of HMI functions hardware and applications. Course topics include PLC to HMI instructions, hardware, HMI graphics, and creating troubleshooting messages displayed on HMI. (MH)

Heating Ventilation and Air Conditioning

This course covers theories, application and principals of refrigeration and air conditioning. Some of the topics include: matter energy and heat basics, the refrigeration process, refrigerant management, general safety practices, specialized HVAC tools, leak testing, system evacuation, system charging, basic electrical, electrical controls, wiring diagrams and electrical and mechanical troubleshooting. The course also includes refrigeration code regulations, construction, installation and licensing of refrigeration systems. (MH)

Fluid Power (Pneumatic/Hydraulic)

This course is designed to provide the basic skills in Fluid Power. The course provides an understanding of fluid power symbols, basic components of fluid power systems including basic laws and formulas for fluid power calculations. Course topics include pumps, control valves, actuators, and maintenance procedures of fluid power systems. Upon completion of this module the trainees will be able to define Fluid Power, list the advantages and disadvantages of Fluid Power, list basic components of Fluid Power. Trainees will be able to read schematics, interpret pneumatic symbols, and troubleshoot Fluid Power components. (MH)

Instrumentation

In this course, participants learn AC/DC fundamentals, how to read and interpret electrical schematics, Identify Component diagrams, use test equipment (Digital VOM, Scope Meter, Sine Square Wave Generator and Bread boarding circuits), Ohms Law Calculations including Voltage, Current, Resistance and Power calculations. Participants apply their knowledge by building and troubleshooting basic circuits. (MH)

IPC Electronics IPC-610: Acceptability of Electronic Assemblies

This course is designed to introduce students to the IPC-610, “Acceptability of Electronic Assemblies” which provides comprehensive accept/reject criteria for handling of electronic assemblies, mechanical assemblies, component installation, location, orientation, soldering, cleanliness of assemblies, marking of assemblies, coatings, laminate conditions, discrete wiring assembly, and surface mount assemblies.

Students will be evaluated on their mastery of the IPC-610 material through post tests that have both open-book and closed-book components. Students must receive an average of at least 70 percent on both tests. Upon satisfactory completion of the course, participants will receive an IPC certification that is valid for 24 months. Everyone who successfully completes the worker proficiency certification will receive a copy of the IPC-610 Acceptability of Electronic Assemblies. (MH)

IPC Electronics IPC-7721: Rework Training-Operator

This course is designed for board repair and modification at the operator level. This course provides a comprehensive, hands on program with more than half of the course content spent in lab. This is an advanced course where the students will be evaluated on both lab and course work.

IPC-7721 Rework Operator Certification students receive IPC certification for the modules relating to the IPC-7721. This course utilizes lecture and practical application to teach the board repair and modification criteria of the IPC-7721 document. This class consists of the 4 rework modules of IPC-7721, including overview, printed wiring repair, laminate repair and conformal coatings. (MH)

IPC J-STD 001 Theory Test Preparation Class

This course is designed to provide students the knowledge of the Soldered Electrical and Electronic Assembly standards. This course explores materials, methods, and verification criteria for producing high quality soldered interconnections. This standard emphasizes process control and sets industry consensus requirements for a broad range of electronic products. This is a comprehensive, knowledge-based series of modules which introduce students to the methods and procedures presented in the JSD -001 document. Students will be guided by the instructor in locating answers to questions associated with the open and closed book certification tests. It is designed for those new to the electronics industry. The class is 100% classroom lecture. Individuals who complete the class successfully will have the skills to pass the two tests, (open & closed book) needed to obtain a J - STD001 (CIS) “Certified IPC Specialist” certification. (MH)



IPC Electronics IPC J-STD-001 Training-Operator

This course is designed to provide students with understanding in the requirements for Soldered Electrical and Electronic Assemblies standards. Course describes materials, methods and verification criteria for producing high quality soldered interconnections. The standard emphasizes process control and sets industry consensus requirements for a broad range of electronic products.

IPC's J-STD-001 Operator Proficiency Series is a comprehensive, knowledge-based series of modules that certify students to the methods and procedures presented in the J-STD-001 document. Designed for operators, the program assists workers in interpreting the J-STD-001 specification through lecture, demonstration and labs. (MH)

IPC Soldering Boot Camp

This course introduces the participant to hand-soldering techniques and soldering knowledge. It is designed for those new to the electronics industry. The class is 25% classroom lecture and 75% hands on skills development. Participants will demonstrate soldering skills using lead and lead-free solder as used in manufacturing circuit boards.

Individuals who complete the class successfully will have the skills to accurately solder, assemble, and inspect electronic components, printed circuit boards, cables and harnesses, and sub-assemblies. IPC guidelines are imbedded in the class activities that include requirements for acceptable interconnections of electronic components, printed circuit boards, and sub-assemblies. (MH)

Lockout/Tagout

This course is designed to provide students an understanding of the OSHA Lockout/Tagout standard 1910.147. Through lecture and hands on exercises, the learners will understand the importance of LOTO in allowing them to work safely with equipment where unexpected start-up or movement could create a hazard. Upon completion of this module the trainees will understand the OSHA Lockout/Tagout regulation 1910.147 principles and the proper steps to perform an effective lockout on a piece of equipment. (MH)

Lubrication

This course exposes participants to the properties of different lubricants. Combining lecture and hands on exercises, participants learn to recognize various types of lubrication systems, how they operate, their maintenance requirements and the importance of following lubrication schedules. (MH)

Machining Essentials

This course is designed to provide basic knowledge of manual machining equipment including grinders and sanders, drill press, lathes, and mills. Course topics include safety, speeds and feeds, drill press operation, grinder operation and saw operation. (MH)

Machine Tool

This course is designed to provide the skills in machine tool functions and applications. The course provides an understanding of operation of machine tool equipment including drill press, band saw, mill, and engine lathe. Course topics include safety, speeds and feeds, engine lathe equipment operation, cutting tools, milling operation, and band saw and drill press operation. (MH)

Machinist's Handbook Overview

This course is designed to provide an understanding of how to effectively use the Machinery's Handbook (Pocket Companion). The course provides an understanding of the handbook and how to find needed information. Topics include Table of Contents, Index, Tapers, Threads, Material Properties, and Tooling. (MH)

Manufacturing Processes

This course is designed to provide the understanding of the different manufacturing processes. The course provides an understanding of types of production, materials, production processes, including machining, Lean manufacturing, just in time inventory control, costing, scheduling, and production and shipping documents. (MH)

Manufacturing Safety

This training course covers basic industrial safety. Topics include lockout/tagout, personal protective equipment, aerial lift and fall safety, machine guarding, confined space safety, fire safety, hazardous materials and hazard communications. General shop safety including forklift pedestrian safety will also be discussed. (MH)

Mechanical Systems/Hand and Power Tools

This course is designed to provide the skills in mechanical power transmission systems and hand tools. The course provides an understanding of mechanical systems, drives of power transmission mechanical equipment and associated hand tools.

Course topics include safety, chain drives, sprockets, belt drives, gears, motors, clutches, couplings and hand tools. (MH)

Mechanical Systems & Drives/Power Transmission

This course provides participants with knowledge of chain drives, sprockets, belt drives, gears, motors, clutches, and couplings with a focus on safety. Upon completion of this module the trainees will exercise power transmission safety, perform inspection, identify components, understand terminology, and perform maintenance. (MH)

Metallurgy

This class is designed to provide information into the aspects of steel compositions, heat treating, plating and surface treatments available on the market. Course topics include, but are not limited to, explanations of various heat treatments plus case hardening treatments as well as operations such as electroplating, anodizing, and black oxidizing. (MH)

Metrology

This course will provide students the basic skills understanding the sciences of measurement. Metrology is important to all stages of manufacturing, including design to the quality of the finished product. This course will cover measurement instruments, scales, gages, micrometers, and calipers. (MH)

Motoman Robot Operations and Programming

This course is designed to provide the basic skills needed to operate and program Yaskawa Motoman Robots. Course topics include Robot Safety, Setup, Controls and Programming. Upon completion of this module the trainees will have the knowledge and skills to safely program and operate an industrial robot. (MH)

Confined Space

This course is designed to help students understand, recognize, and prevent health hazards associated with confined space entry. The course provides an understanding and recognition of confined space hazards, instrumentations used to evaluate atmospheric hazards, ventilation techniques, entry permits, isolating the space, working in the space, and evacuating the space. (MH)

Confined Space Entry/Attendant/Supervisor

This course covers OSHA's standard for confined spaces (29 CFR 1910.146). This standard contains the requirements for practices and procedures to protect employees in general industry from the hazards of entering permit spaces. Confined Space Entry/Attendant/Supervisor level training instructs students about the hazards of limited or restricted means of entry or exit. (MH)

Omron PLC 1

This course provides an understanding of Omron PLC circuits, hardware, and applications. Omron PLC 1 is appropriate for students with little PLC knowledge. It teaches PLC basics and participants begin to write programs. (MH)

Omron PLC 2

Omron PLC 2 is a more advanced class for students with PLC experience or who have been through the Level 1 class. This course covers more advanced PLC instructions and troubleshooting navigation of PLC controllers' software and components. (MH)

OSHA 10

This course covers basic industrial safety. It is designed to provide the trainees with an understanding of OSHA, from its history to how to find and read OSHA standards. Topics include lock/tagout, personal protective equipment (PPE), aerial lift and fall safety, machine guarding, confined space safety, fire safety, hazardous materials, and hazard communications. General shop safety including forklift pedestrian safety will also be discussed. Upon successful completion of this training course, participants will receive an OSHA 10 certification card. (MH)

OSHA 30

This course is designed to help meet the Construction Industry standard training requirements established by OSHA and covers the required topics necessary to obtain the OSHA thirty-hour Construction Industry course completion card. The course is comprised of 25 sections and covers topics pertaining to regulations covered by OSHA standards in 29 CFR 1926. (MH)

Panel Build Technician

Prerequisites: Experience with basic wiring, hand tools and DVM meter usage
In this class, students learn the correct procedures for building a panel using safe and approved methods. Participants use drawings and wiring diagrams to assemble the panels, check for defaults during the build period, and learn how to take suitable action to remedy defects. Students use several approved methods of diagnosing faults demonstrating the correct use of test equipment. (MH)

Pipefitting and Tube Bending

This course provides participants the ability to read drawings and identify the equipment used in pipefitting and tube bending applications. Course topics include pipefitting, methods of tube bending, pipe materials, joints, fittings, pipe hangers and support applications. Upon completion, trainees will be able to read and discuss technical information, identify the correct pipefitting tools, and perform piping installation. (MH)

PLC and Communication Devices

This course is designed to provide the skills in PLC fundamentals. The course provides an understanding of PLC circuits, hardware and applications. Course topics include PLC instructions, hardware, communication devices, and troubleshooting navigation of PLC controller's software and components. (MH)

Plastic Injection Molding

This course will provide students with fundamentals of injection molding. This course provides both classroom theory as well as hands-on experience. Participants will learn injection molding basics and terminology. Learn hands-on how to use basic standard set-up parameters and techniques and how to properly operate the injection-molding machine. (MH)

Press Brake and Forming – Machine Operator

This course will provide students the basic skills needed for understanding press brake and forming. Topics include safety; control panel and operating station; preparation process for operating the CNC press brake; and general operation of the CNC press brake. This course incorporates both lecture (40%) and hands-on exercises (60%). (MH)

Press Brake and Forming -Technical Operator

This course will provide students the basic skills needed for understanding press brake and forming. Topics include safety; principles of bending; tooling selection; material; reading print to understand tolerances; geometry; material types and variances; and understanding how to read engineering prints and layouts. This course incorporates both lecture (40%) and hands-on exercises (60%). (MH)

Pumps, Seals, Bearings and Lubrication

This course will provide participants with an understanding of pumps, seals, bearings, and lubrication. Through lecture and hands on exercises, trainees learn how these components are used, important terminology, and advantages/disadvantages of different components. Participants apply knowledge as they practice installation, maintenance, and troubleshooting of the different components. (MH)

Blueprint Reading

This course will provide students the basic skills needed for technical drawing interpretations of print/blueprints. Areas of instruction include interpreting and understanding print reading. (MH)

RFID for Manufacturing

This course is designed to teach the student the installation, programming, and operation of Radio Frequency identification Systems (RFID) used in manufacturing plants

Resistance Welding

This course will provide the basic skills needed for understanding resistance welding process and equipment. Topics include guidance on the setting-up and control of weld quality; demonstration of the effect of welding parameters; machine characteristics and material on spot welds in steel sheet; consideration of electrode requirements; welding of high strength and coated steels; testing; monitoring; maintenance; and safety. (MH)

Rigging

This course provides participants with rigging skills, and understanding of rigging safety and knowledge of equipment used in rigging applications. Course topics include rigging gear, inspection, load calculations, and manipulating equipment moves. Upon completion of this module the trainees will understand basic OSHA principles, rigging safety and inspection, rigging components and terminology, and rigging fundamentals. (MH)

Rigging for Robot Mechanical Teardown

This course is designed to provide the skills in rigging while tearing down a robot. The course provides an understanding of rigging safety and equipment used in rigging applications. Course topics include rigging gear, inspection, load calculations, and manipulating equipment moves. Upon completion of this module the trainees will understand basic OSHA principles, rigging safety and inspection, rigging components and terminology, and rigging fundamentals. (MH)

FANUC Robot Electrical Maintenance and Troubleshooting

This course is designed to provide an understanding of the Fanuc controller, its main components and to diagnose and repair the robotic electrical system. The instructor will insert faults into the controller and/or robot, and have the students find and repair the faults. (MH)

FANUC IR Vision 2D

This course is designed to provide the basic tasks and procedures required to set up, teach, test, and modify IRVision applications on an R-30iA Robot Controller. The trainee will understand general vision concepts including camera setup, lighting, lensing, 2D Single and 2D Multiple View Process and perform hands on programming with industrial vision systems. (MH)

FANUC Paint Tool Programming and Operations

This course teaches tasks and procedures that an operator, technician, engineer, or programmer needs to set up and program a FANUC robot using the FANUC Robotics PaintTool Application software package. The course consists of lectures, demonstrations, and a series of lab exercises designed to reinforce student learning. Recommended safety procedures are integrated into all training exercises. (MH)

FANUC ROBOGUIDE HandlingPro Workcell Simulation

This course is designed to provide the skills needed for creating a computer 3D simulated robotic workcell using FANUC ROBOGUIDE. This course is designed for application engineers who need to design robotic workcells, perform cycle time, reach ability studies, or generate robot paths. This course will provide procedures for creating a HandlingPro virtual workcell. When completed, the workcell created will contain a FANUC robot with end-of-arm tooling, one or more fixtures for holding a part and a robot TPP Program which moves the part from one fixture to the next. (MH)

FANUC Dispense Robot

This course is designed to provide the students with a basic understanding of the operation, programming and maintenance of the robot dispense controller along with proper sealant applications and sealant properties. Through lecture and hands on exercises, students will gain an understanding of how dispense systems work and the advantages they provide. (MH)

Electricity & Electronics for HVAC Technicians (CTI Course)

This course covers basic electricity, basic electronics and practical circuits and systems related to the needs of air conditioning and refrigeration technicians. This course covers electrical concepts thoroughly, including the more complex circuits and problems that technicians encounter in the field. (MH)

Industrial Electrical Maintenance

This course focuses specifically on the interactions and independence of electrical and electronic components and systems. This course is a comprehensive resource that enables students to learn not only individual subjects but also the way these components and circuits intertwine to make a simple or complex machine operate. (MH)

Robot Mechanical Teardown

This hands-on course provides participants the ability to follow detailed procedures necessary for complete disassembly, inspection, and reassembly of a FANUC robot mechanical unit. Participants will learn preventive maintenance, how to replace parts and to master the robot. (MH)

FANUC Robot Operations & Programming

This course is designed to provide the basic skills needed to operate and program Fanuc Robots. Course topics include Robot Safety, Setup, Teach Pendant Controls and Programming. Upon completion of this module the trainees will have the knowledge and skills to safely program and operate an industrial robot. (MH)

FANUC Advanced Robot Operations and Programming

This course is designed to provide the advanced skills for operating and programming Fanuc Robots. Course topics include collision guard, condition monitor function, multi-tasking, program shift utility and systems operations. The course provides both classroom and hands-on training in the use of advanced controls, operations and part programming. (MH)

Safety, Rigging and Machine Leveling

This course is designed to provide the skills in Rigging and Machine leveling. The course provides an understanding of rigging safety and equipment used in rigging applications. Course topics include rigging gear, inspection, load calculations, leveling equipment planning, and manipulating equipment moves. (MH)

Industrial Shop Math

This course is designed to provide an understanding of mathematics used in shop work. Course topics include decimals, fractions, tolerances, English/metric conversions, trigonometric functions, and basic algebra. (MH)

Sheet Metal Basics

This course will provide trainees with an understanding of sheet metal basics including basic shop safety, sheet metal safety, sheet metal machines, common hand tools and personal protective equipment. Trainees learn basic math important in sheet metal work including basic geometry, measuring and using trigonometric functions to determine angles. Trainees will understand blueprint reading fundamentals including symbols, dimensions, and tolerances. (MH)

Siemens S7 PLC Programming

This course provides participants the ability to program using STEP7, program structures, system functions, and custom block design. STEP7 engineering tools and programming instructions guide the student through realistic applications. (MH)

Statistical Process Control (SPC) W/MSA

Statistical Process Control w/MSA is an 8-hour activity-based course to teach fundamentals of process control and how to apply it to product, process and measurement systems. Participants will use a series of activities to learn and apply tools and techniques associated with process control and measurement systems analysis. (MG)

Systems Troubleshooting Capstone

This training course covers system level training and integration fundamentals. Course topics include concepts of integrated electrical schematics and PLC, integrated mechanical systems components, integrated fluid power systems, and integrated welding systems. (MH)

TIG Welding for Manufacturing

This GTAW welding course will familiarize the student with the basic principles of inert gas welding using TIG welder. The course will provide basic skills using TIG welder on mild steel and variety of positions. This course incorporates lecture and hands-on exercises. (MW)

Turret Punch Press Set-up

This course will provide students the basic skills needed for understanding turret punch press. Topics: safety, tooling setup, tooling parameters, preparation process for operating the CNC turret press, preventive maintenance and proper housekeeping, and reading print to understand tolerances, and verify that the part is to print as required. (MH)

Understanding Variable Frequency Drives (VFDs)

This course is designed to provide basic skills in Variable Frequency Drive fundamentals. Course topics include VFD applications, installation, operations, parameters, and interfacing with PLCs. (MH)

Understanding Ladder Diagrams

Prerequisites: Experience with basic wiring and DVM usage.

Every piece of equipment (no matter how simple or complex) will have a wiring diagram. Understanding how the components of a circuit are connected requires skill in reading circuit schematic diagrams, sometimes called ladder diagrams. In this class students will wire up 25 to 30 common relay logic circuits and prove their operation. They will also troubleshoot circuit faults the instructor has put into a wired circuit. The wiring the students learn in this class will help them in understanding PLC field troubleshooting and wiring. Students also practice field upgrades (adding a new function to circuit operation) on some circuits. (MH)

Weld Inspection Process

This training course will familiarize the student with the basic principles of concentrates on the most common method of visual welding inspection This course incorporates both lecture and hands-on exercises. (MW)

Welding and Fabrication

This course is designed to provide the skills in GMAW, GTAW, SMAW and Oxyfuel cutting and welding. The course provides an understanding of safe welding practices and welding equipment setup and operation. Course topics include safety, equipment setup, GMAW, GTAW, SMAW, and Oxyfuel cutting and welding. (MH)

Wire Harness Design, Manufacture, and Troubleshooting

Students in this will learn the basics of wiring harness design, manufacture, and troubleshooting. The course will cover theory, soldering, splicing, crimping, connectors, wire harness assembly, and wiring harness testing. (MH)

EXCELLENCE IN LEADERSHIP

TRAINING IS PERSONALIZED AND CUSTOMIZED TO YOUR GROUP:

- CLASSROOM SESSIONS OFFERED FOR GROUPS IN SHORT MODULES TO HELP RETAIN THE INFORMATION
- PRACTICAL APPLICATION EMBEDDED
- EXTENDED SERIES TO FOLLOW-UP AND REINFORCE THE SKILLS
- INDIVIDUAL COACHING SESSIONS
- ON-PREMISE, ONLINE OR BLENDED TRAINING AVAILABLE



Analytical & Quantitative Skills

The Leader's Guide to Solving Complex Organizational Problems in Order to Boost Productivity, Efficiency, and Profitability

As organizations become more complex, global, and multi-dimensional, successful Leaders will possess strong analytical and quantitative skills, and know how to effectively communicate with them, to keep their teams and the organizations competitive. In the course, Leaders sharpen their ability to draw specific conclusions from a set of general observations or from a set of specific facts. Your Leaders will learn to heighten their ability to synthesize information and ideas to best lead others to success and increased productivity within the organization. (TH)

Coaching for Managers

We have experienced radical change in the workplace, and it appears that change may be the new normal. We are moving to a more flexible workplace as a permanent solution to environmental and market demands. Learn proven strategies to build a culture of engagement that will add value to your busy day without spending big chunks of time. (TH)

Communication & Digital Transformation

The Corporate Guide to Excellent Communication Before, During and After A Lean Digital Transformation Initiative.

As companies launch digital transformation initiatives to gain efficiencies from new technology, effective communication needs to be at the helm in order to create a positive employee experience. In this course, attendees learn the importance of creating a strategic framework built upon best communication practices. Not only do they learn the importance thereof, leaders and managers also learn how to strategically use them throughout the entire initiative in order to meet business goals and drive success. (TH)

Communication & Lean Six Sigma

The Corporate Guide to Excellent Communication Before, During and After A Lean Six Sigma Initiative.

Forward thinking companies are now realizing the importance of effective communication in order to manage successful Lean Six Sigma initiatives. In this course, attendees learn how to construct a communication plan and effectively utilize communication principles as they work their way through the DMAIC methodology; therefore, drastically increasing the chances of success. (TH)

Conflict Management / Resolution

The Leader's Guide to Mastering Your Conflict Resolution Skills and How to Successfully Use Them in The Workplace.

Wherever there are people, there's bound to be conflict at some point, especially in today's multi-cultural, multi-generational, multi-location workplace environment. How leaders, managers, and other employees in the organization resolve that conflict is what really matters in order to mitigate liability and inefficiency, which ultimately affects profitability. In this course, attendees learn how to effectively and efficiently resolve conflict in a timely manner, as well as, how to apply conflict management / resolution techniques in the workplace environment. (TH)

Contextualization & Observation Skills

A Leader's Guide to Increasing Your Contextualization and Observation Skills to Create a Productive Workplace Among Peers

Every organization is effectively run by people and it is the leader's job to be observant of the workplace environment and make sure it is conducive to productivity, cohesiveness, and is operationally sound. That comes with the leader's ability to contextualize, appropriately read and deliver, verbal and non-verbal signals relevant to all aspect of employee interactions or communicative situations. (TH)

Cultivating Positive Attitudes

How to Cultivate and Instill Positive Employee Attitudes to Enhance Workplace Productivity Across Organizational Departments

People have more positive attitudes when their personal and professional environments are more balanced. In this course, your team will learn the importance of work-life balance and the communicative skill sets they'll need in order to induce and maintain a positive attitude in the workplace. (TH)

DiSC

DiSC Leadership: Everything DiSC Work of Leaders helps leaders take action with personalized tips and strategies that provide clear direction and are easy application. Context-specific feedback and developmental steps along with helpful case-in-point narratives reveal how progress can play out in real business situations.

DiSC Management: Participants learn how to read the styles of the people they manage. The course focuses on five key areas of management including management style, directing and delegating, creating a motivating environment, developing others, and working with your manager.

DiSC Sales: Everything DiSC® Sales is the most in-depth, customizable DiSC® based sales training program available. Everything DiSC Sales increases sales effectiveness using our new expanded in-depth DISC Sales Test. Salespeople learn to improve their sales relationships with buyers.

DiSC Team Building: Using the DiSC behavior assessment, this course will teach your team how to communicate based on your own behavior style and the styles of their teammates. The result is greater input from all team members, reduced tension, more cohesion, and more ownership in decisions, which means your organization moves forward to achieve its goals.



Diversity, Equity and Inclusion (dei)

This is the syllabus or course outline for DEI in the workplace, the duration can be a 1/2-day training on Implicit Bias in the workplace from the content. An inclusive course would be a 3–4-day training or a 12-week course.

The training will be an immersive/interactive training session on what is Implicit (unconscious) Bias, how to recognize it and how to break the bias in the workplace with colleagues and patients/clients/customers. (TH)

Eagerness to Learn & Critical Thinking

The Leader's Guide to Expansive Thinking and Thought Leadership in A High-Performance Corporate Environment

In order to continue to improve as a leader, one must have the eagerness to learn new skills in order to successfully guide their teams and organizations through disparate departments, the cultural demographic shift, and gig economy already taking place. In this course, attendees learn how to utilize Critical Thinking Skills, Leadership Communication Confidence, the 5 Levels of Thinking, and other skills to quickly recognize growth opportunities within teams and the organization. (TH)

Effective Communication and Interpersonal Skills

The Corporate Guide to Increasing Communication and Interpersonal Skills to Effectively Develop and Lead High-Performing Teams

It is a proven fact that organization operate at a higher performing level as the communication and interpersonal skills are enhanced. In this course, your employee will develop their verbal and non-verbal communication skills and interpersonal skills in order to be communicative to all levels of personnel within your organization. (TH)

Emotional Intelligence

Effectively Handling Interpersonal Relationships Through Emotional Intelligence

As we leave the top-down structures behind and shift towards flatter and less hierarchical organizations, managers and leaders need to be emotionally intelligent individuals who can understand and invest in their people in order to empower them to flourish.

In this course, attendees learn how to effectively increase their interpersonal relationships, horizontally and vertically, within the organization as well as the role of emotional intelligence in leadership communication. Attendees will focus on the duality of the emotional spectrum; meaning, the emotions for themselves, as well as, the emotions of a multi-cultural and multi-generational workplace environment. (TH)

EveryDay Leadership

EveryDay Leadership is a series of interactive workshops where leaders will learn straightforward strategies that get results. Robust tools are simple to learn and can be easily adapted to many applications. When tools are easy to remember and applied to real situations, learning is relevant, and tools get used. (TH)

Hiring Contract Management

We all understand that there is a labor shortage, and more importantly, a leadership shortage. However, in the same breadth that we complain about the leadership shortage, we also talk about the high cost of our Generation X managers. Be honest, sometimes we all wonder if we still get our “bang” for the “buck” with our senior leaders. Maybe not, but is it their fault?

Ever since the beginning of the industrial revolution, we’ve held tight to the philosophy that people need to be “managed”. What this has turned into, is that managers are required to make sure their staff shows up on time each day, they don’t take long breaks, they get their work done, etc. Really? Doesn’t this feel like we don’t trust our people?

It’s time to turn the Management model upside down. (TH)

Holding People Accountable

If you contrasted the best leader in your career with your worst, you could probably characterize their differences to a single key attribute: how they handled crucial conversations with you.

More than likely, the best leader in your career created safety during those conversations, didn’t start the meetings by defining you as the villain in the story, and create an action plan that took into account the support you needed to succeed.

On the other hand, the person in your career that failed to help you to develop into a successful professional might have started crucial conversations with you by accusing you of not caring, demeaning you in hopes that you would quit, or maybe even threatened you with termination without listening to you.

This course is designed for leaders that are looking to develop the skills required to be the kind of leader that people trust and respect. (TH)

Improving EQ Through Strategic Job Assignments

Emotional Intelligence is defined as,

“The capacity to be aware of, control, and express one’s emotions, and to handle interpersonal relationships judiciously and empathetically.”

Although the definition seems easy enough, developing EQ in ourselves and our staff is a little more complicated. Characteristics of EQ may include:

- Being able to accept responsibility and criticism in a respectful manner.
- Being able to work with others through demonstrating empathy, listening, and problem solving.

Often what holds people back from developing their EQ is the opportunity to fail. That may seem contradictory, but EQ is demonstrated during the times of challenges, more than in the times of success. This course is designed to help you and your company to develop those opportunities for people to work through challenges that will strengthen their EQ and grow your leadership pipeline. (TH)

Influential Communication

How to Become an Influential Leader, Leverage Your Power of Influence, and Successfully Lead Your Employees to Business Success.

Skilled influential leaders are master communicators, lead with more confidence, are more emotionally intelligent, and possess a host of other much-needed skillsets to successfully lead and manage people. They have the support of their peers and are more respected than those who are more authoritarian. In this training program, your employees will learn the skillset influencing others and explore proven methods to help employees meet their business-related goals. (TH)

Leadership Skills for Supervisors: Communication, Coaching, and Conflict

Supervisors represent an important force in the economy. Supervisors have the power to turn on or turn off the productivity of the people who report to them. They are the crucial interface between the employee on the shop floor or the service desk and the managers of the organization. Although they usually have more technical experience than the employees they supervise, they may not have had a lot of leadership experience. This one-day course will give supervisors the skills in communication, coaching, and conflict they need to be successful.

(MH)

Leadership Skills / Wisdom-Based Leadership

Wisdom-Based Leadership in Today's High-Pressure and Fast-Moving Corporate Environment

“It’s not about what you know, but what you do with what you know!” – Granison Shines.

The ability to lead a non-traditional, multi-generational workplace models takes a certain set of skills today’s leaders definitely need to have. In this course, leaders are taught advanced skill sets needed to stay competitive in order to be successful in today’s wisdom-based economy. (TH)

Leading with Authenticity

How to Lead Successfully with Authenticity in A Multi-Dimensional Organization

Leaders perform at a higher level when they lead with authenticity knowing how to leverage their own strengths and weaknesses. In this course, leaders learn advanced leadership skills by becoming more emotionally aware of themselves, how to resolve internal and external conflict, how to foster teamwork among employees and the balance it takes to master leading team and the organization with authenticity. (TH)

Leading with Communication Confidence

Mastering the Essentials of Verbal and Non-Verbal Communication Confidence to Be A More Effective Leader

Communicating Confidence is at the helm of all leadership styles. Without it, your leaders become unsure of themselves and fail in leading others. In this program, leaders learn how to master and effectively utilize verbal and non-verbal Communication Confidence, the 3 Realms of Confidence, and other key leadership skillsets, to create a thriving workplace

environment. (TH)

Managing Challenging Conversations

Is there a conversation that you, or a member of your team, avoiding? Is this avoidance impacting your team's productivity, teamwork, or your professional reputation? Then it's time to learn how to step into the discussion in a healthy and productive manner.

During this session, you will learn how to manage those challenging conversations that are hindering you from meeting your department and professional goals. Walk into these types of conversations confidently, prepared, and knowing that you can succeed in reaching the desired outcome. (TH)

Managing Performance

In this course participants learn how to turn subjective performance criteria into objective measures tied to organizational goals and develop the tools to have frank discussions with employees about their performance. It is human nature to want to succeed. Providing your employees positive and negative feedback on a frequent basis is necessary to get the best performance. (MH)

Marketing and Sales

There is a formula for success in sales: Your Skill x Amount of People You Talk Too = Your Success. While many sales courses focus mostly on developing your sales skills, increasing the amount of people you talk to is the priority of this lesson. This course will show you how to get maximum exposure at minimum cost. You will learn effective, low-cost, and no-cost strategies to improve sales and develop your image. (MH)

Performing Under Pressure

Mastering the Skill Set Every Leader Needs to Know to Effectively Perform in A High-Pressure Corporate Environment

There are certain skills that leaders must master in order to effectively perform under high-pressure, high-stress environments. In this course, not only will you learn which skills those are, but also how to use your 5 Parts of the Authentic Self to increase and maintain your self-control and leadership influence. (TH)

Persuasive & Influential Skills

Developing Persuasive and Influential Communication Skills for Leaders

One of the most valuable skills a leader can develop is the skill of Influence. In this program, your employees are taught how to be more influential by learning the Influence Process and how to use it effectively to add productivity to your organization. (TH)



Problem-Solving and Creativity Skills

The Leader's Guide to Creativity and Effective Problem-Solving to Produce A High-Performing Work Environment

Creativity and problem-solving are two skill sets that when combined can assist leaders with the ability to come up with new solutions to problems confronting the organization. In this course, team members learn to utilize these two skills to effectively and quickly solve issues and impact the disruptive forces of change, rather than be passive or reactive to issues in the workplace. (TH)

Project Management

This course teaches the mechanics of effective project management, how to get people onboard, better utilize their skills and achieve successful results. Participants can expect to be fully engaged while learning and applying a step by step approach to help reduce the risk and uncertainty associated with project completion. (MG)

Sales Skills for Call Centers

This course will help your participants improve their phone skills which will help them become more confident, gain new customers, and increase sales. Participants will learn how to gain and keep control of the call, build rapport with customers, identify buying signs, respond to objections, and close the deal. (MH)

Selling Smarter

Sales is an exciting and dynamic profession that is often underrated and misunderstood. The backslapping, high pressure, joke-telling salesperson has disappeared. In his place is a new generation of sales professionals: highly trained and well groomed, with the characteristics of honesty, trustworthiness, and competence. This course will help participants enter the new generation of sales professionals. (MH)

SMART Goal Setting

A widely adopted format for setting and achieving goals, setting SMART goals has proven to be one of the easiest and most effective ways improve your chances of success. In this course, participants develop a clear understanding of what SMART goal setting is and how to implement it into daily life. (MH)

Strong Work Ethic

The Corporate Guide to Cultivating A Strong Work Ethic Environment to Increase Employee Productivity

A strong work ethic comes when employees and leaders learn to communicate effectively and trust in their abilities, qualities, and judgements. In this program, your team will develop the communication confidence they need to build a strong work ethic to enhance the efficiency and productivity of your organization. (TH)



Team Building – True Colors®

True Colors is a model of personality identification that is easy to understand, remember and apply.

Imagine, finally understanding why people behave the way they do!

True Colors™ is a course that provides a model for understanding yourself and others based on your personality temperament. The colors of Orange, Green, Blue, and Gold are used to differentiate the four central personality styles of True Colors. The number one reason employees are dissatisfied or leave their jobs is workplace relationship struggles, especially with their direct supervisor or team leader – followed by a lack of communication, trust, appreciation, and fair treatment. The True Colors methodology has helped millions of people find personal success and dramatically improve their interpersonal relationships in these areas and beyond. In addition, it offers an easy integration into existing organizational framework.

TEAMWORK

The Corporate Guide to Creating and Leading High-Performing Synergistic Teams

High-performance team synergy happens when team members share collective beliefs, tasks, behaviors, and goals, while at the same time, valuing the differences and strengths of each individual. In this program, your team will learn how to effectively communicate in order to become an even higher performing team.

As we move into more multi-generational and culturally diverse organizational models, leaders with effective team-building skills will have higher producing and more cohesive teams. However, all team members must have the same awareness to make this happen.

(TH)

QUALITY OPERATIONS

5S Applied – A Foundation for Excellence

5S Applied -A Foundation for Excellence is an activity-based course intended to showcase the power and utility of this proven strategy to improve workplace organization, cleanliness and safety. Participants can expect to be fully engaged while learning and applying 5S to an actual work-related area. This is not just a methodology; it is a culture that has to be built in to any organization which aims for spontaneous and continuous improvement of safe working environment and working conditions. It sends a clear message throughout the organization that safety and orderliness in the workplace is a priority and enables us to continually better meet the needs of our clients and protect our employees. (MG)

8D Problem Solving / Root Cause Analysis

8D Problem Solving / Root Cause Analysis is an 8-hour activity-based workshop that provides the skills and knowledge needed for solving problems using the Global 8D industry standard model. This workshop provides an emphasis on the practical use of common problem-solving tools. The workshop includes technical concepts, simulations, case studies and classroom discussion. Teams of participants will perform practical exercises, allowing them to implement the theories in a team-oriented atmosphere. Company-specific case studies and documentation may be incorporated into the training where appropriate. (MG)

ASQ Refresher Course CQT/CQI

This course prepares participants for either the Certified Quality Technician or the Certified Quality Inspector exam offered through the American Society for Quality (ASQ). It is also for those who wish to learn and apply the course content, which is based on the ASQ's Body of Knowledge for CQT & CQI. (MG)

A3 for Problem-Solving

This 16-hour A3 Problem Solving course is an activity based, pencil and paper tool designed to solve specific problems. It defines the current condition and looks at the root cause of the issue. The A3 also guides the user to define clear steps to implement changes and builds accountability. Participants will experience a simple and effective way to truly understand the way work happens now and how it can be redesigned effectively. (MG)

Certified Quality Engineer Refresher

The aim of this 40-hour course is to prepare participants who are seeking to become certified as a Quality Engineer (CQE), as recognized by the American Society for Quality (ASQ). Unlike other refresher courses that spread the hours equally across the CQE Body of Knowledge (BOK), this course will spend 70% of the hours covering 30% of the BOK. Participants can expect the majority of course time on section VI: Quantitative Methods and Tools, followed by portions of section IV: Product and Process Control and section V: Continuous Improvement.

The CQE is a professional who understands the principles of product and service quality evaluation and control. This BOK and applied technologies include, but are not limited to, development and operation of quality control systems, application and analysis of testing and inspection procedures, the ability to use metrology and statistical methods to diagnose and correct improper quality control practices, an understanding of human factors and motivation, quality cost concepts and techniques, and the knowledge and ability to develop and administer management information systems and to audit quality systems for deficiency identification and correction. (MG)

Continuous Improvement Assessment

The beginning of a successful continuous improvement program is an initial assessment of where your facility and process is. This assessment begins with a walk through of your facility to identify potential improvements using a thorough assessment tool. Following this, there will be a preliminary value stream map created and a list of Key Results Areas will be produced so your team has a clear path toward improvement. Finally, targets for custom training and coaching specifically for your team will be formulated. (MG)

Core Tools

Core Tools is a 24-hour activity-based course intended to teach the requirements of Advance Product Quality Planning (APQP) as part of an organizations IATF16948:2016 Quality Management System. Participants can expect to be fully engaged while learning how to apply Failure Mode & Effects Analysis (FMEA), Statistical Process Control (SPC), Measurement Systems Analysis (MSA) and Production Part Approval Process (PPAP) to ensure that quality products are planned in advance. Case studies and simulations are used throughout the course to provide the hands-on practice needed to better learn these proven techniques. (MG)

Developing a Lean Business

This course reviews key foundational elements of lean concepts that are part of business culture, collective values, beliefs, and habits. The course reviews the importance of leadership and communication; developing and empowering employees; teamwork; safety; standardization; PDCA; kaizen; idea systems; training; and more! (MG)

IATF16949:2016 Internal Auditor Workshop

This 24-hour workshop is intended for those personnel who have been identified as Internal Auditors for the companies IATF16949:2016 Quality Management System. Using the company's existing Quality Management System participants will learn and apply the process approach to effective auditing. Workshop activities include the development of an audit schedule, audit checklist and process audits. Participants will conduct actual audits of the Quality Management System, write audit reports, and present these to management.

(MG)

ISO 9001:2015, Implementation

This comprehensive course introduces you to the new ISO high level structure for management system standards and explores the changes between ISO 9001:2008 and ISO 9001:2015. By attending, you'll be able to identify the gaps in your current quality management system (QMS) and start planning your transition to the revised standard. (MG)

Kaizen Methodology & Tools

This class will examine basic elements of the Kaizen philosophy and methodology, discussing key elements and important prerequisites for a successful implementation of Kaizen. Participants will examine key elements of the Kaizen philosophy and methodology, introducing a structured step-by-step process, that if understood, followed, and implemented, will yield powerful results for the organization. (MH)

Lean Applied

Lean Applied is a 24-hour course to teach a tactical hands-on approach to Lean. Tactical Lean is the deployment and application of lean principles, concepts and methods locally, within a work cell, work group or value stream. Course content is based on the Lean Bronze Body of Knowledge from the American Society for Quality (ASQ). Participants will be asked to identify work related projects where topics being taught are being applied between classes. This class can be taught in either a face to face or virtual training format. (MG)

Lean Bronze Certification

Lean Bronze Certification is a 24-hour course to teach the Lean Bronze Body of Knowledge from the Association for Manufacturing Excellence (AME), the Society of Manufacturing Engineers (SME), Shingo Prize for Operational Excellence (Shingo Prize) and the American Society for Quality (ASQ). The standard assesses a person's lean knowledge (exam), as well as the individual's ability to apply that knowledge (lean project portfolio). This Bronze Level Exam Preparation Course (with ability to sit for Bronze exam as an option), is designed to prepare students to take and pass the multiple choice, open book exam that is the first step in pursuing certification. Bronze Certification is focused on tactical application of lean. Tactical lean is the deployment and application of lean principles, concepts and methods locally, within a work cell, work group or value stream. (MG)

Lean Manufacturing

Lean Manufacturing is a two-day activity-based course to learn and apply a systematic methodology to identify and eliminate waste within a process to improve the flow or velocity of the outputs. Participants can expect to be fully engaged while learning and applying a breakthrough strategy based on the Theory of Constraints to improve a company's overall throughout. Through activities, case studies and simulations participants will experience how flow is achieved through balance of work. (MG)

Lean Six Sigma Greenbelt

Lean Six Sigma Greenbelt is intended for individuals charged with improving process performance. It is intended to teach a structured approach to improve the quality of products & services, outcomes and the bottom line by identifying and removing wastes, the causes of defects (errors), minimizing variability and improving workflow in business processes. Participants can expect to be fully engaged while learning and applying principles, tools and techniques of Lean and Six Sigma for completing improvement projects. Participants are expected to complete a work-related project as part of this course. Lean Six Sigma uses a variety of tools, including statistical methods to determine how various factors affect a dependent variable or feature of a product that may be causing defects or process problems. Participants should download a free 30-day Minitab 18 as a statistical software package that they will use throughout the session. (MG)

Certified Six Sigma Greenbelt

This 5-day course is for individuals preparing for the American Society for Quality (ASQ) Certified Six Sigma Greenbelt exam (CSSGB), and is based on the CSSGB Body of Knowledge. It is intended to teach a structured approach to improve the quality of products & services, outcomes and the bottom line by identifying and removing the causes of defects (errors), minimizing variability and improving workflow in business processes. Participants can expect to be fully engaged while learning and applying principles, tools and techniques for completing breakthrough improvement projects. Participants are also expected to complete a work-related project as part of this course. (MG)

Lean Principles and Application

A lean operation produces just what is needed, when it is needed, with no additional labor, costs, inventory, or time. Gain an understanding of the benefits that lean management can bring to your organization. Learn the fundamentals of lean methodology, define the core principles, and explain the concept of waste. (MG)

Lean Engineering Principles and Application

Simply put, lean organizations are customer-focused. They reduce waste in their value streams by improving workflows and then by subsequently improving the physical layout of their facilities. Process capacity is managed and actually increased by reducing set-up times, improving quality, and ensuring equipment works when it is counted upon to work. Successful implementation of a lean initiative will improve an organization's marketplace and financial performance. However, many aspects of lean are counter-intuitive to traditional manufacturing thinking and practices. It is vital that organizations adopting a lean approach understand the scope, the many elements, and the potential pitfalls of lean.

(MG)

Measurement System Analysis [MSA]

This course is an activity-based workshop to teach fundamentals of process control from a design engineering standpoint and how to apply it to product, process, and measurement systems. Participants will use a series of activities to learn and apply tools and techniques associated with process control. (MH)

Six Sigma Overview

Six Sigma Overview course is to provide participants a vision and description of Six Sigma and how it is used as a breakthrough strategy. Six Sigma is a highly disciplined process improvement methodology that focuses on improving both customer satisfaction and profitability through near-perfect quality. The Six Sigma steps (define, measure, analyze, improve, control) emphasize the use of tools such as process maps, charts, matrices, and so forth to understand a process and evaluate quantified effects of the process using metrics (statistical measurements). (MG)

Six Sigma Yellow Belt

This course is intended for anyone charged with improving performance. Yellow Belts play a vital role in a company's efforts to improve customer satisfaction and overall outcomes, such as quality, reducing errors and improving the bottom line. Participants can expect to be fully engaged while learning and applying principles, tools, and techniques of a Six Sigma Yellow Belt. (MH)

Statistical Process Control [SPC]

Prerequisites: Shop math (or equivalent experience).

This course will instruct the participants in process improvement and variation reduction using Statistical Process Control (SPC). SPC identifies special causes of variation and other non-normal processing conditions so the operator can bring the process under statistical control and reduce variation. The course will address the purpose and role of SPC and the application of variable and attribute charts, calculation of control limits, process capability, Cp, Cpk, Pp, Ppk, and special statistical applications in the everyday working environment. (MH)

Transforming Lean into Business

Everything important to a lean organization should be measured to evaluate its performance plan, identify when conditions are abnormal, and be used as a resource to pinpoint improvement opportunities. This course will review lean metrics, the importance of TPM, education and training, safety and environment, and empowerment. (MG)

Troubleshooting Issues in the Workplace

Problem solving is a vast discipline; it can mean different things depending on the depth of the problem to be addressed. This course gives your employees useful tools that will allow them to make good use of the time that elapses directly after they notice a process non-conformance. They will know what they can do themselves, and how to organize useful information for technicians so informed techs can get to work ASAP. (MG)



Visual Management

5S & Visual Management is an 8-hour activity-based course to improve workplace organization and translate processes and production statuses into easy-to-understand visual overviews. With one glance, the whole team can locate needed items and get an understanding of a factory's performance. This course teaches a set of techniques that makes 5S and operation standards visible so that people can follow them more easily. These techniques expose waste so that it can be prevented and eliminated. 5S & visual management is also an essential part of a Lean management system, which uses displays, metrics and controls to help establish and maintain continuous flow. Visual tools reinforce standards, and help people detect abnormalities at a glance. (MG)

SALES AND CUSTOMER SERVICE

Client Service for Call Centers

In this course participants will gain the skills to provide a great customer experience. They will develop skills necessary to effectively deal with difficult customers. They will learn active listening skills, empathy and how to build rapport. All these skills combined will provide an increase in overall customer satisfaction throughout your organization. (MH)

Dynamic Sales Presentations

A great sales presentation does not demand that you have all the right words to say and can amaze the client with your technical skills. Instead, impress your clients with your understanding of their problems and ability to craft the solution they need. This course will help you teach participants how to create a winning proposal and how to turn it into a dynamite sales presentation. (MH)

Marketing and Sales

There is a formula for success in sales: Your Skill x Amount of People You Talk To = Your Success. While many sales courses focus mostly on developing your sales skills, increasing the amount of people you talk to is the priority of this lesson. This course will show you how to get maximum exposure at minimum cost. You will learn effective, low-cost, and no-cost strategies to improve sales and develop your image. (MH)

Sales Skills for Call Centers

This course will help your participants improve their phone skills which will help them become more confident, gain new customers, and increase sales. Participants will learn how to gain and keep control of the call, build rapport with customers, identify buying signs, respond to objections, and close the deal. (MH)

Selling Smarter

Sales is an exciting and dynamic profession that is often underrated and misunderstood. The backslapping, high pressure, joke-telling salesperson has disappeared. In his place is a new generation of sales professionals: highly trained and well groomed, with the characteristics of honesty, trustworthiness, and competence. This course will help participants enter the new generation of sales professionals. (MH)

COMMERCIAL TRADES

Carpentry

This course is designed to provide a basic understanding of the safe use and maintenance of portable hand and power tools used in the carpentry and building maintenance occupations, as well as basic construction concepts such as walls and floors. Students will practice basic construction techniques using powered and non-powered tools. (MH)

Hand Tools

This course covers the safe use of hand and power tools. Participants learn the proper use and care of common hand tools used for routine maintenance, equipment lubrication, grease gun, screw drivers, hammers, wrenches, vises, clamps, socket sets, pliers, hacksaws, files, wedges and tubing, and small pipe tools. (MH)

Marine Paint and Gelcoat Applications

This (12) hour course is designed to provide skills related to repairs in fiberglass paint, clearcoat, and gel coat. This course will give practical training to help optimize participant's own processes and ultimately help them achieve superior finishes. This will provide instruction on surface preparation, coatings systems, equipment, spray gun set-up and various other tips. (AL, RC)

Plumbing

This 15-week, hands-on program prepares students to enter the growing plumbing industry. Students will learn about plumbing tools, types of pipes and fittings, blueprint reading, installation of plumbing equipment and appliances, navigating the International Plumbing Code Book. Students will also earn their 10-hour OSHA Certification. (AF)

Heating Ventilation and Air Conditioning

Heating and air-conditioning systems control the temperature, humidity, and total air quality in residential, commercial, industrial, and other buildings. Heating, ventilation, air conditioning, and refrigeration technicians install, maintain, and repair such systems. Students will attain a fundamental understanding of basic commercial refrigeration and heating systems including circuit wiring, reading schematics, brazing, and soldering. After demonstrations of refrigeration software, students will build a basic refrigeration system. After successful program completion, students will take the E.P.A. Refrigerant Handling Certification test required to handle commercial refrigerant. (RK)

Copper Pipefitting, Brazing, and Tube Bending for Refrigeration

This course is designed to provide skills necessary in copper pipefitting and tube bending. Course topics include copper piping materials, joints, fittings, bending, soft and hard (brazing) soldering, pipe/tube connection methods, tube swaging and support applications.

(RK)



Refrigerant Pipe Fabrication – Brazing

This twenty (20) hour course is designed to provide skills necessary in copper pipefitting and tube bending. Course topics include basic refrigeration theory and cascade refrigeration, copper piping materials, joints, fittings, bending, soft and hard copper brazing and soldering, pipe/tube connection methods, tube swaging, and support applications. (RK)

Example Programs

Maintenance Technician	
Course	Hours
Blueprint Reading	16
GD&T	16
Electrical Fundamentals	40
Motor Control & Drives	40
Robot Operations & Programming	40
Digital Electronics	40
Fluid Power	24
Electronic Sensors	40
Mechanical Systems & Drives	40
Rigging, Machine Leveling & Alignment	40
Intro to PLC	40
Total Hours	376

Controls Technician	
Course	Hours
Electrical Fundamentals	40
Motor Control & Drives	40
Digital Electronics	40
Electronic Sensors	40
Robot Operations & Programming	40
Robot Electrical Troubleshooting	40
Advanced Robot Operations	40
Fluid Power	24
Welding	16
Basic PLC	40
Intermediate PLC 1	40
Intermediate PLC 2	40
PLC Troubleshooting	40
Total Hours	480

Robot Technician	
Course	Hours
Electrical Fundamentals	40
Motor Controls & Drives	40
Electronic Sensors	40
Robot Operations & Programming	40
Robot Electrical & Troubleshooting	40
Advanced Robot Programming	40
Robot Mechanical Teardown & Rigging	40
Fanuc iRVision 2D	24
Fluid Power	24
Basic PLC	40
Total Hours	368

Production Assembly Operator	
Course	Hours
Manufacturing Safety	16
Teamwork	16
Blueprint Reading	16
Metrology	8
SPC	16
Fluid Power	40
Electrical Fundamentals	40
Mechanical Systems & Drives	40
Manufacturing Processes	16
Total Hours	208

Nuts and Bolts	
Course	Hours
OSHA 10	10
Shop Math	24
Blueprint Reading	16
GD&T	16
Metrology	8
Manufacturing Processes	16
Total Hours	90



6364 136th Avenue Pvt.

Holland, MI 49424

MTEC.ORG or 616.738.8935

Facebook: www.facebook.com/tmtec

Twitter: twitter.com/ThompsonMTEC

Linkedin: <http://linkedin.com/company/thompson-m-tec>

We are conveniently located just east of US-31 and Port Sheldon Road on the north side of Holland. Free parking and a single level facility make getting to class affordable and convenient.