

MICHIGAN  
MANUFACTURING  
TECHNOLOGY  
CENTER

MANUFACTURE SMARTER



MANUFACTURE SMARTER.

# NORTHERN MICHIGAN CERTIFICATE COURSE CATALOG

LEADERSHIP & TEAM SKILLS • CONTINUOUS IMPROVEMENT & LEAN  
SOLUTIONS • TECHNICAL SKILLS • SERVICE OFFERINGS

• 2023 •

SCAN TO  
VIEW ONLINE





YOUR JOURNEY TO

MANUFACTURE SMARTER

BEGINS RIGHT HERE

WITH US.







## THE MICHIGAN MANUFACTURING TECHNOLOGY CENTER

has assisted Michigan's small- and medium-sized businesses since 1991. Through personalized services to meet the needs of clients, we offer expert training and consulting in Cybersecurity, Growth Strategies, Operational Excellence, Leadership Development, Advancing Technology, Research Services and Food Processing.

The Center is closely affiliated with the Michigan Economic Development Corporation (MEDC) with the shared goal of making Michigan businesses vibrant, driving GDP growth, and creating new and lasting jobs.

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## WHO WE ARE

Since 1991, the Michigan Manufacturing Technology Center (The Center) has been consulting with Michigan's small- and medium-sized manufacturers on how to compete and grow. Our team of experts are passionate about what they do and don't stop until the job is done. We've worked with thousands of manufacturers to diversify, get lean, and stay relevant. By continuing to work on projects with the same amount of passion, we will do our part to ensure the future of Michigan manufacturing for decades to come.

Today, the Michigan Manufacturing Technology Center is driving innovation and best practices to keep up with changes in the global economy through consulting services such as sustainability and workforce training, expertise in technology implementation, website development, and more. No other organization in the state of Michigan has the people, the experience, or the breadth of resources that we provide. We're strongly committed to our mission of working with manufacturers to thrive and prosper.

## TRAINING LOCATIONS

### ON-SITE TRAINING AVAILABLE

To support and empower employees and businesses with invaluable training opportunities, The Center offers customizable, on-site training courses covering Operational Excellence, Business Growth, Workforce Skill Development, and Supply Chain Optimization. For more information about services available at your organization, call 231.995.2018.

## ACTIVE LEARNING MODEL

Build participant confidence in their abilities by using our exclusive Active Learning Model (ALM). Each learning objective uses activities to reinforce knowledge transfer. Participants will learn through face-to-face instruction, hybrid or virtual classes.

## MICHIGAN WORKS! & GOING PRO TALENT FUND

The Going PRO Talent Fund (GPTF) provides competitive awards to employers to assist in training, developing and retaining current and new employees. It helps to ensure Michigan's employers have the talent they need to compete and grow, and individuals have the skills they need for in-demand jobs. To begin the application process, companies must first contact their local Michigan Works! office to assess their talent skill gaps and determine if GPTF funding would be an appropriate solution.

## CANCELLATION/RESCHEDULING POLICY

ALL CANCELLATION AND RESCHEDULING CHANGES ARE SUBJECT TO THE FOLLOWING CONDITIONS:

- All cancellations and course rescheduling must be done in writing via email at [events@the-center.org](mailto:events@the-center.org). All online registrations must be ***paid via credit card/PayPal only***.
- Any course registration canceled 15 calendar days or more prior to original course date will receive a full refund ***less*** a \$100.00 administrative fee.
- Any course registration canceled less than 15 calendar days prior to original course date, as well as NO SHOWS, will forfeit all fees.
- Any rescheduling requests must be received at least 15 calendar days or more prior to original course date. A \$100.00 administrative fee will be applicable to all date changes.

*This booklet reflects certificate courses offered by The Center. For a complete schedule of courses for 2023, visit [The-Center.org](https://The-Center.org). All courses listed in this catalog include a certificate upon completion.*

# EMPLOYEE TRAINING HOW IT AFFECTS YOUR COMPANY'S REPUTATION & YOUR BOTTOM LINE



The ongoing skilled trades employee shortage is causing many manufacturers to hire from outside of the industry, bringing in people without manufacturing skills or backgrounds. To ease workers' transitions into a manufacturing environment, a strong training program is essential. This is especially critical now as millennials make up a large part of the available workforce and 87% of millennials view professional development and career growth as very important. To show your company is interested in investing in its employees, training is the answer.

In addition, to provide ongoing training to workers contributes to both employee engagement and productivity as their skills are enhanced and efficiencies are improved. This can greatly impact your bottom line as companies that invest in employee training achieve a 24% higher profit margin than those who don't.

With so much at stake, most companies cannot afford to neglect training for workers. Consider, for example, the following benefits that come from training:

- **Training reduces stress and builds confidence.** Whether someone is completely new to a manufacturing environment or simply trying to learn a new process within the facility, the effectiveness of their training will determine how well they perform. In fact, 74% of workers stated that lack of training was the biggest hurdle in achieving their full potential at work. By gaining additional guidance and understanding through training, workers will be set up for success as they can more confidently approach their jobs.
- **Improved confidence leads to better job satisfaction and production quality.** When workers are confident in their abilities, they become more engaged. This

heightened engagement not only improves worker happiness but also can have massive impacts on quality and productivity.

- **Job satisfaction leads to improved employee retention.** To ensure talent stays within your company, training can help. As you continue to invest in the skills of workers, their job satisfaction increases thus eliminating their desire to look elsewhere for work. With 40% of workers leaving their jobs within the first year due to poor training, this aspect cannot be ignored.
- **Employee retention leads to more favorable company reviews.** By demonstrating that you care about your workers and investing in their professional development, workers will be much more likely to view your company in a favorable way. This will be reflected in employee surveys and workplace culture.
- **Favorable reviews attract more workers to your company.** When workers are happy with their company, they will likely spread the word to others – in person or on review sites such as Glassdoor and Indeed. By establishing a strong reputation as a company that invests in workers and wants them to grow and succeed, hiring efforts will be supported as candidates will view your company in a more favorable and desirable way.

A properly trained employee feels better about the job they are doing and produces quality work. When they produce quality work, they are more engaged in their job and motivated to improve the business as a whole. And just as one bad apple can spoil the basket, the opposite also is true: *happiness and engagement are contagious.*



# LEADERSHIP & TEAM SKILLS

## APPLIED PROJECT MANAGEMENT

This 40-hour interactive course will equip participants to effectively plan, execute, and monitor strategic initiatives. It provides a controlled way to respond to strategic opportunities and market conditions; creates an environment of focused and open communication; provides visibility on project metrics to enable better decision-making and customer service; and accomplish more with less rework and waste. This course meets the educational requirements to sit for the Project Management Professional certification exam.

**40 hours | \$1,950/person | In person or distance learning options**

## DISC

DiSC is a personal behavioral assessment tool used to improve work productivity, teamwork, and communication. DiSC is non-judgmental and helps people discuss their behavioral differences. The following topics are reviewed in this class: appreciate four different work styles and their characteristics, identify participant's own behavioral style and team members' different styles using the DiSC model, and how to improve communication using DiSC

**4 hours | \$270/person | In person or distance learning options**

## EFFECTIVE MEETINGS

Become a more competent and confident leader in this activity-based training on how to plan and run a productive meeting. Improve the effectiveness of meetings and increase the value they contribute to your team and organization.

**4 hours | \$195/person**

## FRONTLINE LEADER

The Frontline Leadership Series is designed to build essential skills for growing leaders. Each session in the series builds upon the last and is developed to provide learners with an understanding of the techniques and concepts related to that subject area. This is achieved through lively discussion, relevant case studies, practice, and hands-on experiential activities designed to support the leader's daily workplace environment.

**16 hours | \$995/person | In person**

**12 hours | \$995/person | Distance learning**

## GET MORE DONE

In this class, we will review the core principles in Getting Things Done: The Art of Stress-Free Productivity by David Allen, as well as the technologies that compliment his model. Get ready to start on a new path to effectiveness!

**3 hours | \$195/person | In person or distance learning options**

## FINANCE FOR THE NON-FINANCIAL MANAGER

Empower individuals to take action and improve the business by understanding financial impacts. This course exposes non-financial managers to financial concepts that are relevant to managing any type of business. The key concept is that managers make daily decisions that impact the financial health of the business and therefore need to understand the basics of financial management.

**4 hours | \$195/person**

## LEADERSHIP DEVELOPMENT SERIES

This program is designed to meet the needs of developing leaders and supervisors with flexible content based on their organizational needs. It will help leaders become more competent and confident resulting in improved employee engagement, and satisfaction, a more productive workforce and reduced turnover. Following our Active Learning Model, learners practice skills in class and between classes to apply their learning to the workplace through simple assigned tasks. This routine of learn, practice and apply is supported through expert one-on-one coaching.

**24 hours | \$1,400/person**

## MYERS BRIGGS TYPE INDICATOR(MBTI)

The Myers-Briggs Type Indicator is a personal behavioral assessment tool designed to help individuals understand their own communication preference and how they interact with others. Having an awareness of what MBTI is can help you adapt your interpersonal approach to different situations and audiences.

**8 hours | \$450/person**

## TEAM BUILDING ACTIVITIES

Participants will learn improved teamwork through multiple activities that engage team behaviors helping them identify effective and ineffective behaviors. These activities metaphorical and intended to encourage teamwork as well as build positive connections among co-workers.

**Please call us for pricing as there are many options for you!**

**NEW CLASSES/DATES ARE ADDED FREQUENTLY. For a schedule of all 2023 courses, visit [The-Center.org](https://The-Center.org).  
WANT TO TAILOR TRAINING TO ADDRESS BUSINESS NEEDS? Contact your Business Solutions Representative.**

WANT TO SCHEDULE A COURSE AT YOUR LOCATION? CALL 231.995.2018.

## LEADERSHIP & TEAM SKILLS

### STRATEGIC PLANNING & DEPLOYMENT

Strategic Planning and Deployment is a systematic process that capitalizes on your single most asset, the talent of your people. Our process begins with reviewing or establishing agreed upon terminology to focus conversations, followed by creation or review of your Mission, Vision and Values. We engage stakeholders through various processes which can include focus groups, surveys, facilitated sessions, SWOT analysis and routine check meetings depending on your organizational needs. We help you focus on three to five major strategies outlined in a one-page plan (A3 format). The overall strategic plan and related specific action plans or projects are vetted and then checked through a routine process of check meetings for continual update and recalibrating.

**36 hours | \$10,800 | Group training rate**

### TRAIN THE ON-THE-JOB TRAINER

Retention and outcomes of organizational knowledge and skills can be dramatically improved by the method with which they are taught. This on-site training uses the six-step Active Learning Model to create a hands-on learning environment. Our focus is on making your training more effective by building confidence in your staff's ability to facilitate trainings.

**8 hours | \$595/person**

### TRAIN-THE-TRAINER

Retention and outcomes of organizational knowledge and skills can be dramatically improved by the method with which they are taught. This course uses the six-step Active Learning Model to create a hands-on learning environment. Our focus is on making your training more effective by building confidence in your staff's ability to facilitate trainings.

**8 hours | \$595/person**

### TRAIN THE ONLINE TRAINER

Retention and outcomes of organizational knowledge and skills can be dramatically improved by applying the Active Learning Model to any type of training and coaching. This virtual training uses the six-step Active Learning Model to create a hands-on learning environment. Our focus is on making your training more effective by building confidence in your staff's ability to facilitate trainings.

**6 hours | \$595/person | Distance learning**

## CONTINUOUS IMPROVEMENT & LEAN SOLUTIONS

### A3 PROBLEM SOLVING

Learn the tools necessary to tackle any problem that arises at your organization. This class is designed to give you hands-on experience utilizing a structured problem-solving process based on A3 thinking and the Plan-Do-Check-Act methodology. Designed for employees who are expected to participate in their organization's problem-solving activities or lead a problem-solving team.

**8 hours | \$395/person**

### DIGITAL 5S

This eight-hour interactive course will equip participants to establish and maintain an effective and efficient document filing system. Participants will practice with planning and executing tools as well as apply sustaining tools. All organizations deal with a combination of hardcopy data and electronic files. Creating a paperless office can be challenging when your electronic filing system is not organized or well maintained. Our Active Learning Model (ALM) -based Digital 5S course will guide the development of a document management system to help your organization reduce errors and cost associated with poor file management practices.

**8 hours | \$395/person**

### LEAN HEALTHCARE SIMULATION

Learn to cut waste and cost out of your office processes. With our hands-on Active Learning Model®, you will acquire awareness of foundational lean principles and tools to help foster continuous improvement in your organization. Led by a certified lean professional, this class will provide a brief overview of core Lean principles including the eight wastes, value stream mapping, problem solving, and basic process improvement tools.

**4 hours | \$195/person**

### LEAN MANUFACTURING CHAMPION WITH KAIZEN

This 96-hour hands-on, interactive course will equip participants to effectively lead lean projects in their workplace. Participants directly apply their learning to mini projects in their workplace and complete an overall company project for presentation at course completion to gain their certification.

**96 hours | \$3,500/person**

### LEAN MANUFACTURING PRACTITIONER

This 28-hour interactive course will equip participants to effectively implement lean concepts where the work is done and to be an effective member of a lean continuous improvement culture.

**28 hours | \$1,500/person**

## CONTINUOUS IMPROVEMENT & LEAN SOLUTIONS

### LEAN OFFICE CHAMPION WITH KAIZEN

This 96-hour hands-on, interactive course will equip participants to effectively lead lean projects in their workplace. Participants directly apply their learning to mini projects in their workplace and complete an overall company project for presentation at course completion to gain their certification.

**96 hours | \$3,500/person**

### LEAN OFFICE PRACTITIONER

This 28-hour interactive course will equip participants to effectively implement lean concepts in an office setting where the work is done and to be an effective member of a lean continuous improvement culture.

**28 hours | \$1,500/person**

### SIX SIGMA GREEN BELT

This training is to equip the continuous improvement-minded individual with a systematic approach to identify and reduce process variation and make data-driven decisions that will improve the process. Class will include classroom training as well as projects and coaching conducted at your facility to solve real problems. The Center will utilize the Active Learning Model® to guide the project team through the DMAIC roadmap, defining Six Sigma, using A3 methodology to manage the project, and introducing Six Sigma tools such as Measurement Systems Analysis (MSA) and Statistical Process Control (SPC) to meet the primary objectives.

### VALUE STREAM MAPPING (VSM)

This class will answer the question, "What is lean and how can I apply VSM to identify and remove waste in my operations?" Through the VSM simulation, you will become familiar with lean concepts, basic principles, and objectives. You will also see how lean tools and techniques help eliminate waste from processes.

**8 hours | \$395/person**

### LEAN SIMULATION

This four-hour interactive course will equip participants to effectively begin a journey toward implementation of lean concepts. The course is conducted in a simulated work environment that will teach the origins of lean and how the methodology can drastically impact cultural and financial performance of an organization.

**4 hours | \$195/person**

## TECHNICAL SKILLS

### BLUEPRINT READING

How to interpret a technical drawing is an essential skill to anyone involved in the manufacturing industry, especially prior to learning GD&T. This course is designed for those who need an introduction to drawing interpretation.

**16 hours | \$1,950/person**

### GD&T FUNDAMENTALS

Need a basic understanding of Geometric Dimensioning and Tolerancing (GD&T)? This course provides an overview of the GD&T system, proper identification and call out of datum features, and the effect of modifiers, especially MMC. Attendees will also learn how GD&T saves money over traditional tolerances and how to interpret the 14 symbols.

**18 hours | \$895/person**

### MEASUREMENT SYSTEM ANALYSIS (MSA)

Equip continuous improvement minded individuals with a systematic approach to identify and reduce process variation, and to make data-driven decisions that result in systematic process improvement.

**8 hours | \$395/person**

### STATISTICAL PROCESS CONTROL (SPC)

This eight-hour interactive training course will equip participants with the knowledge and skills needed to complete basic SPC activities. Discussions and exercises involving various variable and attribute charting, and the basics of chart interpretations are included in this training.

**8 hours | \$395/person**

**NEW CLASSES/DATES ARE  
ADDED FREQUENTLY.**

*For a schedule of all 2023 courses,  
visit [The-Center.org](http://The-Center.org).*

**WANT TO TAILOR TRAINING TO  
ADDRESS BUSINESS NEEDS?**  
*Contact your Business Development  
Advisor.*





# FIND YOUR PASSION

# BY JOINING THE

# CONTINUOUS IMPROVEMENT

# GROUP

## DEVELOP A CULTURE OF CONTINUOUS IMPROVEMENT

The Continuous Improvement Group (CIG) is a membership group whose mission is to develop a culture of continuous improvement and respect for people in their organizations. Within the group, members will grow personally as leaders in continuous improvement through the development of their capabilities, network and career.

Become part of a group focused on improving themselves and their communities. The growing membership of the CIG provides great networking and B2B opportunities. Members can attend top-notch training events with concepts that are directly applicable to the workplace.

As an additional learning opportunity, concepts will be applied to an operational environment with hands-on events where CIG members can directly benefit through team projects that teach tools to improve a business's ability to accomplish its mission.

## WHAT'S INCLUDED IN YOUR MEMBERSHIP

CIG membership is \$450 annually. Deliverables include:

- Two attendees per company
- Four quarterly on-site events in the Upper Peninsula and four quarterly on-site events in northern Michigan (open to all members)
- Four "pop-up" events - includes virtual or in-person learning activities with group planning/input meetings

## JOIN TODAY!



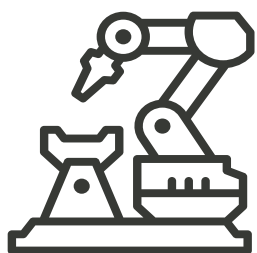
Scan this QR code or visit:  
[www.the-center.org/events](http://www.the-center.org/events)

# OUR

# SERVICES

*Michigan Manufacturing Technology Center (The Center) is here to help your business excel. We offer personalized consulting services that will enable Michigan manufacturers to work smarter, compete and prosper. If you are interested in these service offerings, please contact us by visiting [The-Center.org/Contact-Us](https://The-Center.org/Contact-Us) or by calling 231.995.2018.*

## INDUSTRY 4.0



As manufacturing is advancing, The Center doesn't want Michigan manufacturers to get left behind. Our free Technology Opportunity Assessment allows manufacturers to know where automation can help. The Center's experts will come on-site to work with you in a personalized capacity to enable your company to identify technologies that will provide maximum improvements and return on investment. The Center will also support you throughout the implementation process to ensure a smooth transition.

## HOSHIN PLANNING



This 36-hour, interactive facilitation uses the Lean Methods Group approach with a set of tools allowing you to assess your organization's current state, set direction, and manage your path with visibility, engagement and accountability. Tools provide a controlled way to respond to strategic opportunities and market conditions; to create an environment of focused and open communication; and to provide visibility on metrics and enable better decision-making with less rework and waste.





## PERFORMANCE BENCHMARKING

Competitive analysis is often performed when evaluating how an organization performs side by side to its competitors. At The Center, we have an assessment called Performance Benchmarking which is just that, but for Michigan manufacturing organizations. This tool is only one part of a much larger assessment called the Transformation Planner. The benchmarking assessment compares your organization against other organizations in the industry. Here you can get a better understanding of where your strengths and weaknesses lie. This assessment well can also answer your questions like “What should we be doing?,” “What are we doing right?” and “What could be improved?”



## TRANSFORMATION PLANNER

Lowering costs and increasing profits while improving processes is what all manufacturing organizations strive to accomplish. However, understanding how to formulate a plan to make these goals a reality can pose many challenges. At The Center, we have a staff of experienced consultants ready to help your organization create a manufacturing operational improvement process, known as the Transformation Planner. Not only does the Transformation Planner identify manufacturing operational improvement opportunities but helps to calculate the financial benefits based on current position and future targets.





# CREATE A TARGETED WORKFORCE TRAINING PLAN WITH THE CENTER

Manufacturers are facing an unprecedented talent shortage. Building a relevant, effective training plan is key to developing and retaining all employees, regardless of their role or level within the organization. Manufacturers seeking additional funding and support for their training initiatives can find help through the Going PRO Talent Fund (GPTF). GPTF provides competitive funding to employers to assist in training, developing and retaining current and newly hired employees.

## CUSTOMIZE YOUR COMPANY'S TRAINING PLAN

The Center's experts can help companies develop a realistic, targeted training plan according to their needs and goals. Make planning easier using The Center's:



### Interactive Course Planning Guide.

With The Center's interactive planning guide, make choosing your training path easier. With this electronic document, planning the who, what and how much is as simple as a few strokes of your keyboard. The Center's planning guide allows you to view all courses, calculate investment, choose onsite vs. at The Center and more.



### Target Audience Guide.

Take the guesswork out of planning. Want to know which classes are tailored toward managers, auditors, technology leaders and more? This guide breaks down who benefits most from each course.

**WANT TO TAILOR TRAINING TO ADDRESS BUSINESS NEEDS?**  
**Contact your Development Advisor.**

To access The Center's training resources, visit  
[www.the-center.org/Resources/GoingPRO](http://www.the-center.org/Resources/GoingPRO)  
or scan the QR Code.



## NOTES





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## THE MOST ADVANCED SUPPLY CHAIN TOOL FOR MICHIGAN MANUFACTURERS

CONNEX™ Michigan is a FREE, cloud-based platform that centralizes the Michigan supply chain network into a searchable database. Sponsored by the Michigan Manufacturing Technology Center and supported by the MEDC, CONNEX™ is designed to be the premier system for domestic supply chain sourcing and networking. CONNEX™ offers:

-  **Powerful search capability.** Use search filters to connect based on exact needs.
-  **Business recovery & resilience.** Immediate access to suppliers and supply chain partners.
-  **Supply chain optimization.** Find suppliers and highlight risks within your supply chain.
-  **Business development.** Highlight your assets, certifications, capabilities and other industry information to help manufacturers find you.

## WANT TO MAXIMIZE YOUR OPPORTUNITIES? UPGRADE TO CONNEX™ MARKETPLACE!

CONNEX™ Marketplace connects ALL U.S. suppliers, manufacturers, primes and OEMs into one searchable, NATIONAL database. Upgrade for only \$500/year after you create your free CONNEX™ Michigan account.

*To learn more about CONNEX™  
Michigan, or for assistance creating  
your FREE account:  
Visit: [The-Center.org/CONNEX](http://The-Center.org/CONNEX)  
Email: [CONNEX@the-center.org](mailto:CONNEX@the-center.org)*



COMPLETE SYLLABI  
FOR EACH OFFERING  
IS AVAILABLE! CONTACT  
YOUR MICHIGAN  
MANUFACTURING  
TECHNOLOGY CENTER  
SENIOR BUSINESS  
ADVISOR, DEVELOPER OR  
DIRECTOR.

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