IN THIS ISSUE:

HOW TO ENHANCE THE EMPLOYEE EXPERIENCE

IS YOUR BUSINESS PROFITABLE?
Your overhead may help solve the puzzle.

INDUSTRY 4.0
What to look for in 2021.

MANUFACTURE SMARTER.
YOUR JOURNEY TO
MANUFACTURE SMARTER
BEGINS RIGHT HERE
WITH US.
TABLE OF CONTENTS

ABOUT US & LOCATIONS ................................................................. 2
YOUR HEALTH & SAFETY .............................................................. 3
HOW TO REGISTER ...................................................................... 4
WHAT WE DO ............................................................................. 5
CLASSES & EVENTS CALENDAR ................................................... 6
ARTICLES IN THIS ISSUE
How Profitable is Your Business Really? .......................................... 10-11
Enhancing the Employee Experience .............................................. 16
Industry 4.0 - What to Look for in 2021 ......................................... 18
CLASS LISTINGS
Cybersecurity/Industry 4.0 ............................................................ 7
Improving Information Security Through Risk Management
Environmental ............................................................................. 7
ISO 14001:2015 Internal Auditor
Food Processing ............................................................................. 7
Preventive Controls Qualified Individual (PCQI)
Leadership/Culture ...................................................................... 8-9
Building Better Teams
Building Culture
Building Your Employee Experience
Finance for the Non-Financial Manager
Manufacturing Skills Development
Practical Approach to Project Management Using Smartsheet®
Supervisor Skills
Supervisor Skills 2.0 - Sustained Leadership Program
Lean Principles & Techniques ....................................................... 9-12
SS/Visual Management & Pull Systems
A3 Problem Solving
Error Proofing/Poka-Yoke
Lean Manufacturing Champion: Continuous Improvement
With Technology
Lean Office Champion
Risk Management & Total Cost of Ownership for Supply Chain
Standard Work
Total Productive Maintenance/Quick Changeover
Understanding Lean Principles & Techniques 4.0
Quality Management ...................................................................... 13-14
6D Problem Solving
DISTANCE LEARNING: 6D Problem Solving
AIAG-VDA Process FMEA for Practitioners
AS9100D Internal Auditor
Blueprint Reading
Core Tools: APQP, PPAP & FMEA
Core Tools: Measurement Systems Analysis
Core Tools: Statistical Process Control
IATF 16949:2016 Internal Auditor
ISO 13485:2016 Internal Auditor
ISO 9001:2015 Internal Auditor
Risk Management Using FMEA
Six Sigma .................................................................................... 15
Advanced Problem Solving: Lean Six Sigma Yellow Belt
Lean Six Sigma Green Belt
Six Sigma Black Belt
COMPLETE SERVICE OFFERINGS ............................................... 17

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 develop more effective business leaders, drive product and process innovation, promote company-wide operational excellence and foster creative strategies for business growth and greater profitability.
ABOUT US

The Michigan Manufacturing Technology Center understands what enables businesses to grow and provides services to implement and track strategies that do so.

WHAT WE BELIEVE

Michigan manufacturing. It’s what drives us. It’s why we exist. To make manufacturers better, to show them how to grow, adapt and add jobs here. We assist by showing best practices. By finding efficiencies. By connecting manufacturers with partners. By coaching. By leading. And by doing the little things that add up to greatness. Our team delivers by lowering costs, reducing waste and more. Manufacture more efficiently. Manufacture more competitively. Manufacture smarter.

The Michigan Manufacturing Technology Center is accredited by the International Association for Continuing Education and Training (IACET) and is authorized to issue the IACET CEU.

LOCATIONS

THE CENTER - MARQUETTE
northerninitiatives.org

THE CENTER - TRAVERSE CITY
the-Center.org

THE CENTER - SAGINAW
svsu.edu

THE CENTER - GRAND RAPIDS
rightplace.org

THE CENTER - PLYMOUTH
The-Center.org
YOUR HEALTH & SAFETY ARE OUR TOP PRIORITY

The Michigan Manufacturing Technology Center (The Center) has been closely monitoring the COVID-19 situation to prepare and implement necessary changes and ensure our clients’ and employees’ safety. We are committed to making all who enter our building feel confident that they are in a safe environment. Newly implemented processes for our guests include:

- **DISINFECTING/CLEANING PROTOCOLS**
  The Center is committed to strict proactive and reactive sanitation and disinfection practices. Our facility has been professionally cleaned with a fogging decontamination service, disinfecting all areas including objects, walls, floors and ceilings, as well as an antimicrobial application. Applications will be repeated every 90 days, or as necessary. High contact points, such as door handles, desks, chairs, faucets, etc., will be cleaned throughout the day. Portable disinfection stations have been set up in select locations and a 30-day minimum of disinfectant supplies has been secured.

- **ENTRY/EXIT & HEALTH SCREENINGS**
  To ensure the health of all who are in the building, guests must now only enter The Center through the front entrance. Every individual will have their temperature taken (must be at or below 100.4°F) by a contactless thermometer and must pass a quick health screening questionnaire for allowed entry. Designated exit doors have been identified to control traffic flow and reduce pre-screening exposure.

- **SOCIAL DISTANCING**
  The Center is committed to maintaining safe social distancing protocols (no handshakes or embraces, keeping six feet distance when interacting, etc). Social distancing signage throughout the building should be adhered to.

- **PERSONAL PROTECTIVE EQUIPMENT**
  Upon entry, guests will receive a face mask and gloves. Face masks must be worn at all times by everyone in the building. Employees and visitors must wear gloves when in high-touch areas. Prior to entering a restroom a face mask must be worn and hands are required to be washed with soap and water prior to exiting. At all times, The Center has a 30-day supply of PPE. Great emphasis is placed on frequent handwashing.

- **REDUCED MEETING & CLASS SIZES**
  The Center has reduced class occupancy by nearly 50% to accommodate for six feet distance between individuals. For those attending meetings at The Center, dedicated rooms have been identified for use which will have common surfaces disinfected between meetings. Private meetings will be limited to no more than 10 people.

- **EMPLOYEE HEALTH CHECKS**
  To ensure the health of staff and all who enter the building, employees must pass daily health and temperature screenings prior to entering the building.

- **FOOD & BEVERAGE**
  For the safety of all guests, pre-packaged meals will be served for classes which include a lunch option. Designated protocols should be followed regarding beverages.
REGISTRATION IS QUICK & CONVENIENT

Advance registration is required. Since many courses fill early, we recommend registering at least two weeks before the course begins.

TRAINING SITE:
Training is held at 45501 Helm St. in Plymouth, MI unless otherwise noted.

Customizable courses can be conducted at your facility. Courses cover Operational Excellence, Business Growth, Workforce and Leadership Development, Cybersecurity, Food Processing and Supply Chain Optimization.

REGISTER ONLINE
Registering online is quick and convenient with our secure registration system using your credit card. To search or register for upcoming events and classes, visit The-Center.org.

CALL US
Speak with a Michigan Manufacturing Technology Center Coordinator or register for upcoming classes by calling 888.414.6682 during business hours: Monday through Friday, 8:00 AM to 5:00 PM.

CANCELLATION/RESCHEDULING POLICY AND FEES
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. 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.
• Any rescheduling requests occurring in less than 15 calendar days prior to original course date will be subject to an administrative fee of 50% of the course fee.

NEARBY LODGING
For guests needing overnight accommodations, The Center has partnered with various hotels in the area. We hope you’ll take advantage of one of the many choices near our Plymouth, Mich. location. To search hotels near The Center, visit The-Center.org/Resources/Lodging.
OUR SUCCESS DEPENDS ON YOURS

After completing a project with The Center, our clients are surveyed by an independent third party to gauge the impact of our services on operational performance. Focus is placed on jobs retained or created, investments made, sales generated or retained and the calculation of cost savings.

WHAT WE DO

GROWTH
Strategy to improve business. Marketing that attracts customers.

OPERATIONAL EXCELLENCE

CYBERSECURITY
Information security assessment. Regulatory compliance.

LEADERSHIP DEVELOPMENT

SKILL DEVELOPMENT
Advance faster. Six Sigma, QMS, supply chain, sales, blueprint reading.

ACCELERATING TECHNOLOGY
Advanced tools to gain insights. Make effective strategic decisions.

RESEARCH SERVICES
Get answers. Explore facts. Find the information. Qualitative and quantitative.

FOOD PROCESSING
Improve efficiencies. Process standardization and prevention-based controls.

HOW WE ASSISTED 443 MICHIGAN MANUFACTURERS IN THE PAST YEAR:

- $83.2M in new sales
- $738.2M in retained sales
- $54.9M in cost savings
- $173.7M in investments made
- 6,764 jobs created or retained

CONNECT WITH US

ANYWHERE, ANYPLACE, 24/7

SOCIAL MEDIA is an essential part of professional development and staying on top of industry trends. Connect with the Michigan Manufacturing Technology Center online to find opportunities for networking, knowledge sharing with peers, upcoming events and the latest in manufacturing news.

BLOG
From Lean Manufacturing to Six Sigma, our blog delivers the latest manufacturing topics and trends from industry experts. Subscribe at The-Center.org/blog.

LINKEDIN
Connect with us in a professional setting, gaining access to up-to-date industry news, training and job opportunities. Don’t wait.

FACEBOOK
From manufacturing tips and news to upcoming courses, events and discounts, The Center’s official Facebook page has it all. ‘Like Us’ and join the conversation!

STAY CONNECTED:
### DECEMBER

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>Advanced Problem Solving: Lean Six Sigma Yellow Belt</td>
</tr>
<tr>
<td>1-2</td>
<td>Risk Management using FMEA</td>
</tr>
<tr>
<td>3-4</td>
<td>Core Tools: APQP, PPAP &amp; FMEA</td>
</tr>
<tr>
<td>4-18</td>
<td>Practical Approach to Project Management Using Smartsheet®</td>
</tr>
<tr>
<td>7</td>
<td>Blueprint Reading</td>
</tr>
<tr>
<td>8-9</td>
<td>Manufacturing Skills Development</td>
</tr>
<tr>
<td>10</td>
<td>Improving Information Security Through Risk Management</td>
</tr>
<tr>
<td>14</td>
<td>Risk Management &amp; Total Cost of Ownership for Supply Chain</td>
</tr>
<tr>
<td>15-17</td>
<td>ISO 9001:2015 Internal Auditor</td>
</tr>
</tbody>
</table>

### JANUARY

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-22</td>
<td>Supervisor Skills</td>
</tr>
<tr>
<td>11-28</td>
<td>Lean Manufacturing Champion: Continuous Improvement With Technology</td>
</tr>
<tr>
<td>12</td>
<td>Standard Work</td>
</tr>
<tr>
<td>13</td>
<td>DISTANCE LEARNING: 8D Problem Solving</td>
</tr>
<tr>
<td>14</td>
<td>5S/Visual Management &amp; Pull Systems</td>
</tr>
<tr>
<td>15</td>
<td>Finance for the Non-Financial Manager</td>
</tr>
<tr>
<td>18-20</td>
<td>Advanced Problem Solving: Lean Six Sigma Yellow Belt</td>
</tr>
<tr>
<td>18</td>
<td>Core Tools: Measurement Systems Analysis</td>
</tr>
<tr>
<td>18-19</td>
<td>Manufacturing Skills Development</td>
</tr>
<tr>
<td>19</td>
<td>8D Problem Solving</td>
</tr>
<tr>
<td>19-20</td>
<td>ISO 9001:2015 Internal Auditor</td>
</tr>
<tr>
<td>21-22</td>
<td>AIAG-VDA Process FMEA for Practitioners</td>
</tr>
<tr>
<td>21</td>
<td>Core Tools: Statistical Process Control</td>
</tr>
<tr>
<td>25</td>
<td>Total Productive Maintenance/Quick Changeover</td>
</tr>
<tr>
<td>26</td>
<td>A3 Problem Solving</td>
</tr>
<tr>
<td>26</td>
<td>Error Proofing/Poka-Yoke</td>
</tr>
</tbody>
</table>

### FEBRUARY

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-18</td>
<td>Lean Manufacturing Champion: Continuous Improvement With Technology</td>
</tr>
<tr>
<td>2</td>
<td>Standard Work</td>
</tr>
<tr>
<td>2-10</td>
<td>Supervisor Skills</td>
</tr>
<tr>
<td>4</td>
<td>5S/Visual Management &amp; Pull Systems</td>
</tr>
<tr>
<td>4</td>
<td>Finance for the Non-Financial Manager</td>
</tr>
<tr>
<td>5-26</td>
<td>Building Culture</td>
</tr>
<tr>
<td>5-12</td>
<td>Practical Approach to Project Management Using Smartsheet®</td>
</tr>
<tr>
<td>8</td>
<td>8D Problem Solving</td>
</tr>
<tr>
<td>8-11</td>
<td>IATF 16949:2016 Internal Auditor</td>
</tr>
<tr>
<td>8-9</td>
<td>Preventive Controls Qualified Individual (PCQI)</td>
</tr>
<tr>
<td>9-24</td>
<td>Supervisor Skills</td>
</tr>
<tr>
<td>10</td>
<td>3/25 Six Sigma Black Belt</td>
</tr>
<tr>
<td>15</td>
<td>Total Productive Maintenance/Quick Changeover</td>
</tr>
<tr>
<td>16</td>
<td>A3 Problem Solving</td>
</tr>
<tr>
<td>16</td>
<td>Core Tools: Measurement Systems Analysis</td>
</tr>
<tr>
<td>16</td>
<td>Error Proofing/Poka-Yoke</td>
</tr>
<tr>
<td>19</td>
<td>Blueprint Reading</td>
</tr>
<tr>
<td>23-24</td>
<td>Core Tools: APQP, PPAP &amp; FMEA</td>
</tr>
<tr>
<td>23-26</td>
<td>ISO 13485:2016 Internal Auditor</td>
</tr>
<tr>
<td>23-25</td>
<td>ISO 9001:2015 Internal Auditor</td>
</tr>
<tr>
<td>25 - 3/5</td>
<td>Supervisor Skills</td>
</tr>
</tbody>
</table>

### MARCH

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-5</td>
<td>IATF 16949:2016 Internal Auditor</td>
</tr>
<tr>
<td>2-4</td>
<td>Lean Office Champion</td>
</tr>
<tr>
<td>4-5</td>
<td>Building Your Employee Experience</td>
</tr>
<tr>
<td>8-9</td>
<td>ISO 14001:2015 Internal Auditor</td>
</tr>
<tr>
<td>8-9</td>
<td>Risk Management Using FMEA</td>
</tr>
<tr>
<td>9-10</td>
<td>Core Tools: APQP, PPAP &amp; FMEA</td>
</tr>
<tr>
<td>11</td>
<td>Standard Work</td>
</tr>
<tr>
<td>12</td>
<td>5S/Visual Management &amp; Pull Systems</td>
</tr>
<tr>
<td>12-19</td>
<td>Practical Approach to Project Management Using Smartsheet®</td>
</tr>
<tr>
<td>15</td>
<td>A3 Problem Solving</td>
</tr>
<tr>
<td>15</td>
<td>Error Proofing/Poka-Yoke</td>
</tr>
<tr>
<td>16-17</td>
<td>Building Your Employee Experience</td>
</tr>
<tr>
<td>16-25</td>
<td>Supervisor Skills</td>
</tr>
<tr>
<td>17</td>
<td>Understanding Lean Principles &amp; Techniques 4.0</td>
</tr>
<tr>
<td>22</td>
<td>Core Tools: Measurement Systems Analysis</td>
</tr>
<tr>
<td>22</td>
<td>Improving Information Security Through Risk Management</td>
</tr>
<tr>
<td>23 - 25</td>
<td>Supervisor Skills 2.0 - Sustained Leadership Program</td>
</tr>
<tr>
<td>26</td>
<td>8D Problem Solving</td>
</tr>
<tr>
<td>30 - 4/1</td>
<td>AS9100D Internal Auditor</td>
</tr>
<tr>
<td>31 - 4/1</td>
<td>Core Tools: APQP, PPAP &amp; FMEA</td>
</tr>
</tbody>
</table>

### APRIL

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-22</td>
<td>Lean Manufacturing Champion: Continuous Improvement With Technology</td>
</tr>
<tr>
<td>6</td>
<td>Standard Work</td>
</tr>
<tr>
<td>8</td>
<td>5S/Visual Management &amp; Pull Systems</td>
</tr>
<tr>
<td>8</td>
<td>Blueprint Reading</td>
</tr>
<tr>
<td>9</td>
<td>Finance for the Non-Financial Manager</td>
</tr>
<tr>
<td>9</td>
<td>Risk Management &amp; Total Cost of Ownership for Supply Chain</td>
</tr>
<tr>
<td>9</td>
<td>Understanding Lean Principles &amp; Techniques 4.0</td>
</tr>
<tr>
<td>12</td>
<td>Blueprint Reading</td>
</tr>
<tr>
<td>13-30</td>
<td>Lean Six Sigma Green Belt</td>
</tr>
<tr>
<td>13</td>
<td>Risk Management &amp; Total Cost of Ownership for Supply Chain</td>
</tr>
<tr>
<td>15</td>
<td>Building Better Teams</td>
</tr>
<tr>
<td>19</td>
<td>Total Productive Maintenance/Quick Changeover</td>
</tr>
<tr>
<td>20</td>
<td>A3 Problem Solving</td>
</tr>
<tr>
<td>20-21</td>
<td>Core Tools: APQP, PPAP &amp; FMEA</td>
</tr>
<tr>
<td>20</td>
<td>Error Proofing/Poka-Yoke</td>
</tr>
<tr>
<td>22-23</td>
<td>Manufacturing Skills Development</td>
</tr>
<tr>
<td>27-28</td>
<td>Practical Approach to Project Management Using Smartsheet®</td>
</tr>
<tr>
<td>27-29</td>
<td>Supervisor Skills 2.0 - Sustained Leadership Program</td>
</tr>
</tbody>
</table>

### CAN'T FIND A CLASS YOU'RE LOOKING FOR?

For assistance or to discuss available training options at your facility, call 888.414.6682 and speak with a Michigan Manufacturing Technology Center Coordinator or email inquiry@the-center.org.
**ENVIRONMENTAL**

**ISO 14001:2015 INTERNAL AUDITOR (CEU Credits: 1.4)**
The Center’s highly engaging ISO 14001:2015 Internal Auditor course will quickly acquaint you with ISO 14001:2015 standards and requirements, and help your company prepare for certification.

2 days of classes

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
- January 19-20, 2021 (Sterling Heights)
- March 8-9, 2021

COST ............................................................................... $795/Person

**FOOD PROCESSING**

**PREVENTIVE CONTROLS QUALIFIED INDIVIDUAL (PCQI)**
The Food Safety Modernization Act (FSMA) gives the Food and Drug Administration (FDA) broad new powers to prevent food safety problems, detect and respond to food safety issues, and improve the safety of imported foods. All food facilities must establish and implement a Food Safety Plan that includes an analysis of hazards and risk-based preventive controls.

A Preventive Controls Qualified Individual (PCQI) is required to prepare and oversee the implementation of the facility’s Food Safety Plan in compliance with FSMA requirements.

Key course topics include:
- Developing a Food Safety Plan
- Hazard Analysis and Preventive Controls
- Verification and Validation Procedures
- Corrective Action (Recall Plan)
- Record Keeping Procedures

This course is recognized by the FDA as meeting the requirements to become a PCQI. Individuals successfully completing this training will receive a certificate from the Food Safety Preventive Controls Alliance (FSPCA).

2 days of classes

SESSION(S) AVAILABLE (8:00 AM - 6:00 PM)
- February 8-9, 2021

COST ............................................................................... $895/Person

---

Classes and events are added frequently. Visit The-Center.org for an up-to-date schedule of all classes and free events.
BUILDING BETTER TEAMS
Building Better Teams is an activity-based training course that provides participants with an understanding of the importance of teamwork. It creates a workplace environment that encourages and values team member contributions towards problem solving and continuous improvement. Through a variety of activities, participants will experience challenges teams face and will learn how to analyze and discuss behavioral characteristics of people. These individual attributes contribute to mutual trust, allowing teams to learn from each other by sharing information, skills and experiences.

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
- April 15, 2021 (Sterling Heights)

COST ........................................................................................................... $395/Person

BUILDING CULTURE
This workshop explores how to effectively build and maintain a healthy company culture. Exercises involve analyzing the current culture, creating a vision for the intended culture and building an actionable culture transition plan. Discussions center around the definition, importance and difficulties of culture.

4 days of classes
SESSION(S) AVAILABLE (8:00 AM - 12:00 PM)
- January 15, 22, 29 & February 5, 2021
- February 5, 12, 19 & 26, 2021

COST ........................................................................................................... $1,500/Person

BUILDING YOUR EMPLOYEE EXPERIENCE
(CEU Credits: 1.4)
In this two-day session, participants examine an employee experience framework along with the required HR systems. An Employee Experience Maturity Model is used to build a unique plan to cultivate a stronger employer brand, improve employee engagement and enable improved business results. Participants leave with the ability to build effective HR principles and skillfully enhance employee experiences.

2 days of classes
SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
- March 4-5, 2021
- March 16-17, 2021 (Kalamazoo)

COST ........................................................................................................... $995/Person

FINANCE FOR THE NON-FINANCIAL MANAGER
This class exposes non-financial managers to financial concepts that are relevant to managing any type of business, with an additional focus on manufacturing. The key concept is that managers make daily decisions that impact the financial health of the business, so they need to understand the basics of financial management.

SESSION(S) AVAILABLE (8:00 AM - 12:00 PM)
- January 15, 2021
- February 4, 2021 (virtual)
- April 9, 2021 (virtual)

COST ........................................................................................................... $295/Person

MANUFACTURING SKILLS DEVELOPMENT
(CEU Credits: 1.4)
Designed for students who are new to manufacturing, Manufacturing Skills Development will provide a foundational understanding of the processes, approach and culture needed to run an effective and efficient operation. The course covers:

Quality Management Systems – Offers an introduction to the systems and processes necessary to deliver a conforming product on time while controlling variation in the process.

Problem Solving Skills – Addresses the various tools and techniques available for problem solving in the manufacturing environment, focusing on the ability to identify the problem, isolate the root cause, and document the entire process.

Lean Manufacturing – Gain an understanding of Lean principles and techniques and how they can be applied to maximize customer value, minimize waste and reduce cost. Get to know the eight types of waste that exist in every organization. A hands-on simulation will be used to demonstrate Lean tool application.

Culture & Motivation – Learn effective operational communication, motivational techniques and conflict management.

2 days of classes
SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
- December 8-9, 2020
- January 18-19, 2021
- April 22-23, 2021 (Kalamazoo)

COST ........................................................................................................... $995/Person

PRACTICAL APPROACH TO PROJECT MANAGEMENT USING SMARTSHEET®
Gain the fundamental project management tools to effectively manage and complete projects. Whether you are a newly assigned project manager or have been in the field for years but want to strengthen your approach, this course is for you. This course is perfect for general managers, plant managers, project managers, engineers, and quality, supply chain and I.T. personnel. Learn how to utilize Smartsheet® to standardize projects and to facilitate communication between all identified stakeholders. Smartsheet® is a valuable tool used to provide document control used for project status updates.

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
- December 4, 11 & 18, 2020
- February 5 & 12, 2021
- March 12 & 19, 2021
- April 27-28, 2021 (Sterling Heights)

COST ........................................................................................................... $1,800/Person
LEADERSHIP/CULTURE

SUPERVISOR SKILLS
(CEU Credits: 2.8)
Do you have an employee with leadership potential or a newly promoted supervisor or foreman and want to give them practical management training? This is the class you need. Get equipped with the knowledge and skills to thrive in today’s management environment. Learn how to identify:

• Various leadership styles
• Different behavioral characteristics and determine the best method of relating to each type
• Communication barriers and techniques to enhance communication
• Time management issues

4 days of classes

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• January 6, 8, 20 & 22, 2021
• February 2-3 & 9-10, 2021 (Sterling Heights)
• February 9-10 & 23-24, 2021
• February 25-26 & March 4-5, 2021 (Kalamazoo)
• March 16, 18, 23 & 25, 2021

COST .................................................................$975/Person

SUPERVISOR SKILLS 2.0 – SUSTAINED LEADERSHIP PROGRAM
(CEU Credits: 1.5)
Good leadership is not just characterized by the ability to motivate a group toward a common goal—it’s the ability to cross over from being someone employees must follow to someone they want to follow. The Center’s 18-hour Supervisor Skills 2.0 course will further equip participants with the knowledge and skills needed to become effective leaders. Attendees of this interactive course will be acquainted with additional leadership skills necessary to relate to subordinates, peers and their managers in a productive and efficient manner. Topics covered include:

• Power of Influence
• Crucial Accountability
• Knowing Your Social Style
• Exploring Learning Styles

Prerequisite: The Center’s Supervisor Skills (CEU Credits: 2.8) course.

3 days of classes

SESSION(S) AVAILABLE (9:00 AM - 4:00 PM)
• March 23-25, 2021 (Sterling Heights)
• April 27-29, 2021

COST ........................................................................ $975/Person

LEAN PRINCIPLES & TECHNIQUES

5S/VISUAL MANAGEMENT & PULL SYSTEMS
Over time, most workplaces become cluttered with outdated information and materials kept “just in case it’s needed.” This course will provide the tools needed to clear the clutter and create a world-class visual workplace where there is a place for everything. Learn how to successfully transform a factory into a well-organized operation where many messages concerning product quality, productivity, schedule and safety are accurately delivered every day.

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• January 14, 2021
• February 4, 2021
• March 12, 2021
• April 8, 2021

COST ............................................................................$495/Person

A3 PROBLEM SOLVING
Participants will use problem solving tools (5-Whys and Fishbone Diagram) to assist in the continual improvement process with special emphasis on creating and implementing a lean business strategy. Attendees gain further knowledge to confidently measure and improve their processes through data-driven decision making. An exercise in understanding and creating an A3 report is included.

SESSION(S) AVAILABLE (8:00 AM - 12:00 PM)
• January 26, 2021
• February 16, 2021
• March 15, 2021
• April 20, 2021

COST .............................................................................$295/Person

ERROR PROOFING/POKA-YOKE
Error proofing is essential to running a smooth operation, cost-savings and maintaining sanity in the workplace. Understand the benefits of building in quality at the source by implementing methods or devices into the manufacturing process instead of inspection only at the end of the process. Best practice examples are introduced regarding how companies prevent errors or defects. A hands-on exercise in The Center’s simulated factory is included.

SESSION(S) AVAILABLE (1:00 PM - 5:00 PM)
• January 26, 2021
• February 16, 2021
• March 15, 2021
• April 20, 2021

COST .............................................................................$295/Person

Classes and events are added frequently. Visit The-Center.org for an up-to-date schedule of all classes and free events.
I have met with many business leaders who believe they are more profitable than they really are. In evaluating gross margin, or the difference between revenue and Cost of Goods Sold (COGS), they assume all their parts or assemblies are more profitable than reality. However, this perspective fails to account for overhead costs that are not properly utilized.

Failing to consider overhead costs gives managers an inaccurate idea of how their business is performing. To correctly calculate these expenses and profits, they must first understand what exactly these costs involve.

The graph at right represents annual sales generated by customers at a company.
Following the 80/20 rule, larger customers, those on the left side of the graph above, represent 80% of the revenue while being only 20% of the customers. The customers on the far right represent 20% of the revenue, while being 80% of the customers. To better understand the true profitability of these sales, let’s consider a sample project sold to a customer on the right side of the graph.

A small, one-hour job is sold to a customer for $250. The COGS for the job is $125 so the gross profit is 50% at $125. At first glance, this may appear profitable. However, this does not consider all overhead costs, or Selling, General and Administrative (SG&A) expenses, associated with the sale. This includes paying the sales team to sell the order ($80) and administrative costs to process the order ($55). With these costs subtracted from the sale, the business has now lost money (-$10).

**HOW TO EVALUATE PROFITABILITY IN YOUR BUSINESS**

By understanding and evaluating these additional costs behind the sale, companies may find some of their customers are not generating the profits they initially thought – in fact, some are costing the business money. Once these customers have been identified, what can companies do to improve their profits?

The solution will likely be different for each company and customer depending on several factors. One of the concepts we explore is “trimming the tail.” If the company decides a customer’s business is costing them too much money, it might make sense to discontinue working with them. This typically involves ending relationships with those customers toward the right side of the graph above, or essentially “trimming the tail.” For example, if total company revenue is decreased from $10M to $9.5M after trimming the tail, while the gross margin increases from $1M to $1.5M, the company will have improved gross margin by 6.6%.

Aside from trimming the tail, other options include:

- **RAISING PRICES:** If the company does not wish to cut ties with a customer, this is one way to maintain the relationship while generating more profits. There are typically two outcomes that result from raising prices:
  - The customer agrees to pay the higher price, leading to higher profitability
  - The customer does not agree to pay the higher price because you have outgrown their business, and they are now hindering your profitability; therefore, your profits will improve without their business

- **DOING NOTHING:** In some instances, there may be a strategic benefit in not doing anything in the short-run. If a certain customer only has smaller projects now but there is a potential for larger projects in the future, it is likely worth it for the company to maintain business with the customer and maintaining prices in order to win these opportunities down the line.

When net profitability is the main focus of companies, managers get a more accurate idea of how the business is performing. Now is the time for companies to evaluate revenue streams in this way and see where opportunities to maximize profits may lie.

Learn more about how The Center can help your business at The-Center.org.
LEAN PRINCIPLES & TECHNIQUES

LEAN MANUFACTURING CHAMPION: CONTINUOUS IMPROVEMENT WITH TECHNOLOGY
(CEU Credits: 5.6)
Developing internal lean manufacturing champions helps organizations successfully implement proven techniques for eliminating waste. Using competency-based and hands-on approaches, Lean Manufacturing Champion provides team leaders the knowledge and skills to apply lean business solutions within their own operations, resulting in reductions in the time and cost to execute business processes. To enhance classroom instruction, methods are reinforced in The Center’s simulated factory. Participants will transform a traditional batch-process into a lean cellular manufacturing process.

8 days of classes
SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• January 11-14 & 25-28, 2021
• February 1-4 & 15-18, 2021
• April 5-8 & 19-22, 2021
COST .........................................................................$2,800/Person

LEAN OFFICE CHAMPION
(CEU Credits: 2.1)
Apply lean principles beyond the manufacturing floor. Typically 70% of labor costs are attributed to above-the-shop floor activities including support operations such as quoting, accounting, sales and engineering. Lean Office Champion training offers a comprehensive hands-on approach to teach team leaders how to identify opportunities for improvement through reduction in time-consuming transactional activities.

3 days of classes
SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• March 2-4, 2021
COST ..............................................................................$1,500/Person

RISK MANAGEMENT & TOTAL COST OF OWNERSHIP FOR SUPPLY CHAIN
This class provides participants with an overview of the following Risk Management and Total Cost of Ownership (TCO) concepts:
• Awareness of the impact of risk events if there is no Risk Management Plan
• Assessing risk impact for identified supply chain risks
• Creating risk mitigation strategies and a risk response plan to manage the identified supply chain risks
• Reporting and monitoring ongoing supply chain events
• Estimating the financial impact of a potential supply chain risk event and understand how to include that in the TCO estimate
• Understanding the importance of implementing an effective TCO strategy
• Identifying and measuring TCO cost drivers
• Using the TCO calculator to make strategic sourcing decisions

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• December 14, 2020
• April 9, 2021
• April 13, 2021 (Kalamazoo)
COST ...............................................................................$495/Person

STANDARD WORK
A key ingredient in the creation of a lean enterprise, Standard Work is a set of procedures for each operational process that documents the most effective, balanced combination of people, machines, materials and space to meet customer demand. Standard Work begins as an improvement baseline, but as it is used to improve, it further evolves into a reliable method.

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• January 12, 2021
• February 2, 2021
• March 11, 2021
• April 6, 2021
COST ..........................................................................................$495/Person

TOTAL PRODUCTIVE MAINTENANCE/QUICK CHANGEOVER
Total Productive Maintenance (TPM) is a company-wide effort to improve equipment performance, which then leads to higher productivity, better quality and increased profits. Participants learn how to calculate and use Overall Equipment Effectiveness, the key metric for measuring equipment performance. Emphasis is placed on the importance of teamwork and integration between production and maintenance departments. Focus is also placed on reducing set-up times for manufacturers to increase their flexibility, because frequent set-ups are necessary to produce a variety of goods in small lots. Inexpensive and highly effective techniques are shown to achieve quick changeovers.

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• January 25, 2021
• February 15, 2021
• April 19, 2021
COST ..........................................................................................$495/Person

UNDERSTANDING LEAN PRINCIPLES & TECHNIQUES 4.0
Understanding Lean Principles and Techniques 4.0 demonstrates how lean can be applied to an organization to maximize customer value, minimize waste and reduce costs through workplace organization and visual controls, cellular manufacturing, quality at the source and pull scheduling. Gain a better understanding of how lean principles, when effectively applied, can positively impact your company. Learn how to transform a traditional manufacturer into a lean producer by focusing on material and information flow resulting in lead-time reductions.

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• March 17, 2021
• April 9, 2021 (Kalamazoo)
COST ..........................................................................................$395/Person

ADVANCED PROBLEM SOLVING: LEAN SIX SIGMA YELLOW BELT (See page 15)
LEAN SIX SIGMA GREEN BELT (See page 15)
QUALITY MANAGEMENT

8D PROBLEM SOLVING
(CEU Credits: .7)
Root cause analysis and problem-solving tools are presented and demonstrated in this session. Both internal (yield issues) and external (warranty, field failure and customer complaint) problems are introduced. Teams use these tools to identify, analyze and determine root cause and ultimately solve the issues. Understanding is gained through practical, hands-on exercises using common measurement gauges. Problems are presented to demonstrate the typical formats for reporting the findings, applying solutions and corrections.

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• January 19, 2021
• February 8, 2021
• March 26, 2021

COST ................................................................. $395/Person

DISTANCE LEARNING: 8D PROBLEM SOLVING
This virtual course presents the necessary tools and teaches how to utilize them. The final product of this 4-hour class is a student who understands how to report findings, determine and apply remedies, and solve the problems so they don’t happen again.

SESSION(S) AVAILABLE (8:00 AM - 12:00 PM)
• January 13, 2021 (virtual)

COST ................................................................. $295/Person

AIAG-VDA PROCESS FMEA FOR PRACTITIONERS
(CEU Credits: 1.4)
Equip yourself with the knowledge and skills needed to complete the new FMEA methodology, which includes activities surrounding the 7-Step Approach and use of Action Priority Ratings. The steps are covered with exercises designed to ensure maximum understanding. At course completion, participants will have the tools needed to objectively evaluate the effectiveness of their current FMEA process while planning and using the new AIAG-VDA FMEA process.

2 days of classes
SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• January 21-22, 2021

COST ................................................................. $795/Person

AS9100D INTERNAL AUDITOR
(CEU Credits: 2.1)
This seminar helps attendees understand the basics of a process based Quality Management System as well as the specifics of the AS9100 aerospace system and how to audit it. Learn how the various requirements may, or may not, apply to your type of organization and be better prepared to implement, understand and audit your system. Participants will conduct several mock audits through the process and will gain a practical understanding of both the ISO 9001 and AS9100 system audit programs.

3 days of classes
SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• March 30 - April 1, 2021

COST ................................................................. $995/Person

BLUEPRINT READING
(CEU Credits: .7)
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.

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• December 7, 2020
• February 19, 2021
• April 8, 2021 (Kalamazoo)
• April 12, 2021

COST ................................................................. $395/Person

CORE TOOLS: APQP, PPAP & FMEA
(CEU Credits: 1.4)
Gain a better understanding of the planning, launch and validation of new products or processes. It blends the three core tools of APQP, PPAP and FMEA and guides participants through important steps of the launch process. Utilized correctly, the deployment of these core tools leads to continuous improvement, defect prevention and the reduction of variation and waste.

2 days of classes
SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• December 3-4, 2020
• February 23-24, 2021
• March 9-10, 2021 (Kalamazoo)
• March 31 - April 1, 2021
• April 20-21, 2021 (Sterling Heights)

COST ................................................................. $795/Person

CORE TOOLS: MEASUREMENT SYSTEMS ANALYSIS (CEU Credits: .7)
We’ve all heard the expression “garbage in, garbage out.” The same can be applied when product acceptance or process control decisions are based on invalid data. Measurement Systems Analysis examines the sources of variation in the measurement process as well as information about measurement characteristics based on accuracy, precision and stability.

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• January 18, 2021
• February 16, 2021 (Sterling Heights)
• March 22, 2021

COST ................................................................. $395/Person

CORE TOOLS: STATISTICAL PROCESS CONTROL
(CEU Credits: .7)
Participants run a group of sequentially produced parts and then measure them to determine average, range and sigma. Control limits are calculated using these same parts, and additional samples are measured and plotted to determine where the process is going and why. Interpretations of results are part of this course as well as capability study exercises.

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
• January 21, 2021

COST ................................................................. $395/Person
QUALITY MANAGEMENT

IATF 16949:2016 INTERNAL AUDITOR

(CEU Credits: 2.8)
During instruction, emphasis is placed on effective auditing processes, skills and techniques. Participants will learn how to develop an audit plan and report required for management review. Corrective and preventive actions will be reviewed. Clear definitions of the five clauses of the IATF 16949:2016 requirements are covered. Participants will be introduced to techniques for interfacing with third party registrars, as well as non-intrusive auditing practices.

4 days of classes

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
- February 8-11, 2021
- March 2-5, 2021 (Sterling Heights)

COST ............................................................................. $1,195/Person

ISO 13485:2016 INTERNAL AUDITOR

(CEU Credits: 2.8)
Gain a solid understanding of the basics of a process-based quality management system and the specifics of the ISO 13485 medical device system, and how to audit it. Learn how the various requirements may, or may not, apply to your type of organization and be better prepared to implement, understand and audit your system. Auditor tips and techniques are studied as well as scheduling, planning and performing audits. You will conduct several mock audits and end with a practical understanding of the ISO 9001 and added ISO 13485 system audit programs.

4 days of classes

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
- February 23-26, 2021

COST ................................................................................ $1,195/Person

ISO 9001:2015 INTERNAL AUDITOR

(CEU Credits: 2.1)
Learn the information necessary for conducting internal quality audits. Emphasis is placed on effective auditing processes, skills and techniques. Participants will be instructed in developing an audit plan and the audit report required for management review. Corrective and preventive action will be reviewed. This includes an overview of the 2015 standards and requirements, as well as hands-on practice exercises for ISO 9001.

3 days of classes

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
- December 15-17, 2020
- February 23-25, 2021

COST ................................................................................ $995/Person

RISK MANAGEMENT USING FMEA

(CEU Credits: 1.4)
This training will orient participants to the steps of Risk Management using the tool of Failure Mode Effects Analysis (FMEA) to define, manage and reduce risks. Processes also used in this training include brainstorming, creating SIPOCs and creating process flowcharts to help in the understanding and analysis of the process. The training addresses each step of conducting an FMEA, with exercises designed to ensure maximum understanding of both Design FMEA and Process FMEA.

2 days of classes

SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)
- December 1-2, 2020
- March 8-9, 2021

COST ................................................................................ $795/Person
SIX SIGMA

ADVANCED PROBLEM SOLVING: LEAN SIX SIGMA YELLOW BELT  
(CEU Credits: 2.1)
Lean Six Sigma Yellow Belt (LSSYB) training develops the skills of the professional who participates as a supporting team member in a variety of six sigma projects led by certified Six Sigma Green or Black Belts. Become well versed in the foundational elements of the Lean Six Sigma Methodology.

Upon completion of the class (no project required), a LSSYB will understand the broad aspects of lean six sigma methodology including competence in the subject matters contained within the five phases of the DMAIC process: Define, Measure, Analyze, Improve and Control. Professionals who attend will gain the knowledge to implement, perform, interpret and apply lean six sigma principles in a skilled, yet limited and/or supportive context.

3 days of classes
SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)  
• December 1-3, 2020  
• January 18-20, 2021
COST .............................................................................. $1,500/Person

LEAN SIX SIGMA GREEN BELT  
(CEU Credits: 5.6)
Lean Six Sigma Green Belt certification develops the skills of the internal change agent by implementing the proven methods of both lean and six sigma. The training covers the application of established techniques to remove waste, improve operational speed, lower costs and deliver ultimate customer satisfaction. Lean Six Sigma Green Belt certification focuses on improved quality and accuracy, minimized cost and variation, on-time delivery and optimized operational speed, all of which enable organizations to become more efficient, profitable and flexible producers.

This certification provides the participant with a coordinated approach to rapidly reduce errors, streamline activities in difficult or complex operational transactions and foster company-wide innovation. Lean Six Sigma Green Belt certification blends the best of lean thinking with the statistical logic of six sigma. Deploying Lean Six Sigma Green Belt initiatives can dramatically reduce operational constraints by utilizing proven lean and six sigma methods to optimize critical processes.

Participants receive Lean Six Sigma Green Belt certification upon submission and approval of a lean six sigma project report.

8 days of classes
SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)  
• April 13-16 & 27-30, 2021
COST .............................................................................. $3,450/Person

SIX SIGMA BLACK BELT  
(CEU Credits: 7.0)
The certified Six Sigma Black Belt is a professional who can explain six sigma philosophies and principles to their reports, including supporting systems and tools. A certified Black Belt should demonstrate team leadership, understand team dynamics and assign team member roles and responsibilities.

Black Belts have a thorough understanding of all aspects of the DMAIC (Define, Measure, Analyze, Improve, Control) model in accordance with six sigma principles. They have basic knowledge of lean enterprise concepts, are able to identify non-value-added elements and activities and are able to use specific tools.

Six sigma professionals exist at multiple levels – each has a different role to play. Certified Black Belts lead problem-solving projects, train and coach project teams.

So, it’s clear to see that six sigma provides much of the structure for running a manufacturing facility in a clean, lean and seldom mean manner. Become a Six Sigma Black Belt!

10 days of classes
SESSION(S) AVAILABLE (8:00 AM - 5:00 PM)  
• February 10-12 & 25-26 & March 8-10 & 24-25, 2021
COST .............................................................................. $7,350/Person

Classes and events are added frequently. Visit The-Center.org for an up-to-date schedule of all classes and free events.
When workers are engaged, they are known to produce substantially better results, treat customers better while attracting new ones, and are more likely to stay with their current company. With so many clear benefits, how can organizations ensure all workers are as engaged as possible? They must focus on enhancing the entire employee experience.

This experience encompasses everything from recruitment to separation, including Onboarding, Developing and Managing Transitions, as depicted in the model at right.

The employee experience begins with Onboarding, which includes the recruitment, selection and hiring of an employee. This lays the groundwork for the entire employee experience as workers begin to learn about the company’s values and what to expect in their role. Unfortunately, many companies do not have a structured onboarding process that positions the worker for long-term success – instead, most only provide a brief orientation.

Next, the Develop and Grow phase includes the assimilation, development and performance of the employee. Formal assimilation plans help by ensuring employees feel supported during their first year with the company. Plans cover building a relationship with the leader, joining the team, learning the work and navigating the culture. Performance management programs also are necessary and work effectively when they are perceived as fair and transparent.

The final phase, Managing Transitions, looks at the entire career journey, including promotion and eventual separation. Succession planning is key as both parties work to identify prospective positions and potential successors, while completing periodic assessments of the plan to keep it current and relevant.

In all aspects of the employee experience, the organization must support the whole person by focusing on fair compensation and treatment, health care coverage, communicating well, providing opportunity, recognizing accomplishments and providing honest feedback to help them improve.

In today’s changing and evolving environment, companies must make a purposeful effort to attract – and keep – the very best employees. Focusing on the employee experience provides a roadmap to show what your organization can and will offer to all employees.

Mike Beels has served in the role of Lean Program Manager for the Lean Business Solutions Team at The Center for more than 12 years. His areas of expertise include change leadership, workforce engagement and succession planning, as well as the entire portfolio of Lean strategies and methodologies. As a professional trainer, Mike can command an audience and deliver course material clearly, leaving trainees energized and ready to transfer their new skills to the shop floor or office.

For further assistance with enhancing your employee experiences, join The Center for one of our new courses centered on company culture: Building Your Employee Experience and Building Culture. Learn more about these classes or register for an upcoming course at The-Center.org.
COMPLETE SERVICE OFFERINGS

Don’t see a topic you are looking for, need more information, or want to schedule customized training at your company? Call 888.414.6682 or email inquiry@the-center.org.

COSTING
- Activity-Based Costing Application & Implementation
- Cost Identification & Management
- Finance for the Non-Financial Manager

CYBERSECURITY
- Information Security Assessment
- NIST 800-171 Compliance

ENVIRONMENTAL
- Building a Successful ISO 14001:2015 Program
- ISO 14001:2015 Employee Overview
- ISO 14001:2015 Internal Auditor
- ISO 14001:2015 Management & Organizational Transition

FOOD
- 5S/Visual Management
- BRC/SQF QMS Mentoring
- FMEA for Food Processors
- Food Producer Website
- Foreign Supplier Verification Program (FSVP)
- Fundamentals of Food Processing
- GMP Mentoring
- Improvement Planning & Process Mapping
- Mentoring/Problem Solving
- Preventive Controls Qualified Individual (PCQI) Food Safety
- Process Improvement
- Risk Management for Food
- Total Productive Maintenance/Quick Changeover

GROWTH SERVICES
- Business Development Mentoring
- CRM Development
- Customer Cultivation
- Innovation Engineering
- More Effective Messaging
- Sales Acceleration
- Sales Assessment & Strategic Growth Roadmap
- Website Development/Design/Optimization/Maintenance

INDUSTRY 4.0
- Industry 4.0 Technology Demonstrations
- Project Management of Manufacturing Technology Installation
- Technology Opportunity Assessment

LEADERSHIP/CULTURE
- Building Better Teams
- Business Metrics & SMART Goals
- Business Operations Planning
- Business Succession Planning
- Leadership Mentoring
- Manufacturing Skills Development
- Practical Approach to Project Management Using Smartsheet®
- Supervisor Skills
  - Communicating & Making Meetings Work
  - Effective Delegation & Time Management
  - Leading People Through Change
  - Successfully Handling Conflict & Problem People
  - Workforce Engagement

LEAN MANUFACTURING
- 5S Training & Application
- A3 Problem Solving
- Advanced Problem Solving: Lean Six Sigma Yellow Belt
- Cellular Manufacturing & Plant Floor Layout
- Error Proofing/Poka-Yoke
- Lean Manufacturing Champion: Continuous Improvement With Technology
- Lean Manufacturing Kaizen Event
- Lean Mentoring
- Lean Office Champion
- Lean Office Kaizen
- Lean Overview
- Lean Six Sigma Green Belt
- Production Preparation Process
- Setup Time Reduction/Quick Changeover/Single Minute Exchange of Dies
- Standard Work
- TimeWise 102: Lean for a Low Volume/Mixed Model Job Shop
- Total Productive Maintenance Kaizen
- Total Productive Maintenance Workshop
- Understanding Lean Principles & Techniques (BUZZ)
- Value Stream Mapping & Deployment Plan

MARKET INTELLIGENCE
- Assess Market(s) for New Product
- List, Prioritize & Pre-Qualify Prospects
- Market Intelligence Mentoring
- Narrow 10 Markets to 3 Based on Criteria
- What the Market Thinks of Me, My Competition or Issues

QUALITY MANAGEMENT
- AIAG-VDA Process FMEA for Practitioners
- AS 9100D Internal Auditor
- Blueprint Reading
- Core Tools: APQP, PPAP & FMEA
- Core Tools: Measurement Systems Analysis (MSA)
- Core Tools: Statistical Process Control (SPC)
- GD&T
- IATF 16949:2016 Internal Auditor
- ISO 13485:2016 Internal Auditor
- ISO 9001:2015 Internal Auditor
- Layered Process Audit
- MedAccred Assistance Program
- 8D Problem Solving, Root Cause Analysis & Reporting
- Risk Management Using FMEA

SIX SIGMA
- Advanced Problem Solving: Lean Six Sigma Yellow Belt
- Design of Experiment
- Lean Six Sigma Green Belt
- MINITAB Training
- Six Sigma Black Belt
- Six Sigma Green Belt
- Six Sigma Mentoring
Manufacturers realize the greatest results from Industry 4.0 technologies when they are applied strategically. Going into 2021, two of the greatest strategic challenges facing manufacturers are engagement and productivity. So, how can technologies support these improvement efforts?

With the help of Augmented Reality during onboarding – such as by using light to project process steps onto a work area – new hires can be carefully guided through work instructions to ensure all steps are performed adequately and without error. The immediate benefits to this are clear: scrap, rework and defects are minimized, existing workers no longer need to take out the time to train others, new workers instantly have the training they need to be successful and performance can be tracked and critiqued.

Sensors and dashboards take productivity a step further by providing a detailed depiction of performance. Many manufacturers are unaware of how well they are performing. By adding sensors to equipment to gather data, then analyzing that data via dashboards, leaders can better understand if, when and why problems are occurring in production. This data is essential to guide manufacturers in the correct direction to achieve greater performance overall.

How can Industry 4.0 technologies support your business strategy in 2021? Learn more about relevant, affordable options by contacting our experts at inquiry@the-center.org or visiting The-Center.org.