#### We train on your schedule.

Visible Edge Institute has been providing classroom training for over 30 years and remote training for over a decade. Our flexible, comprehensive training programs are designed to accommodate individuals of **all** skill levels.

As a Licensed Post-Secondary Educational Institution, our training provides students with hands-on experience, in-depth skills in leading applications, and industryrecognized certifications. You'll get the opportunity to earn industry-recognized certifications in all of our programs.

Train remotely or in-center, while maintaining on-demand access to our live instructors. Students can also access training lessons 24/7 for self-study.

**Remote Attendance:** Remotely tap into our training center to work directly with live instructors on-demand via phone, video call, screen sharing, email, chat or text.

**In-Center Attendance:** Choose to attend training in our physical training center on your schedule, not ours. Our renovated incenter learning environment utilizes state of the art equipment and modern learning techniques including one-on-one live instructor interactions, digital materials, labs, and project work.



You may qualify to have your entire program paid for, 100%, with no out-of-pocket costs to you. All programs are federally approved by WIOA, Section 30, Trade Adjustment Act, Vocational Rehab, and more.

#### We are a Veteran Friendly Institution.



GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). For more information about education benefits offered by the VA, visit the official U.S. government website at http://www.benefits.va.gov/gibill.

## **GLOBAL HEADQUARTERS**

Visible Edge, Inc. 38 Technology Way The Millyard Technology Park Nashua, New Hampshire 03060

## **CONTACT US**

۴	(888)-VIS-EDGE (888)-847-3343
×	info@visible-edge.com
f	www.facebook.com/VisibleEdgeInc
9	www.twitter.com/VisibleEdge
in	www.linkedin.com/company/visible

- www.linkedin.com/company/visible-edge/
- www.visible-edge.com
- www.visible-edge.com/career-centers/

Ve-I reserves the right to change fees, courses, topics, policies, programs, services and personnel as required. "On-Demand" refers to instructor and facility access during our normal business hours, which are Monday – Friday from 8:00AM to 5:00PM except Federal Holidays and shutdowns. Instructor support is limited to purchased training materials and labs. Remote setup assistance is included.

COPYRIGHT © 2022 - Visible Edge, Inc. All Rights Reserved.

# ADVANCED MANUFACTURING TECHNOLOGIES

Learn how to manage, improve, and automate core manufacturing & production processes.

# **VISIBLE EDGE**

## **BECOME AN EXPERT IN ADVANCED** MANUFACTURING

Discover how companies manage, improve, and automate core manufacturing & production processes.

Start off the program strong by learning advanced skills and concepts related to the rapidly emerging field of additive manufacturing (3D Printing). Continue on to dive into core courses and topics - ensuring that you cover all bases of Advanced Manufacturing.

Learn everything from cybersecurity for manufacturing to continuous process improvement, process flow charting, quality fundamentals, value stream mapping, product design, Lean manufacturing, Lean culture, PLC's, Kaizen, Six Sigma, and Microsoft Visio.

Quality Fundamentals are also essential in AMT - which is why we incorporate topics such as maintenance approaches, process design and development, supply chain management, customer service, audits, and similar topics.

To finish off the program, explore your choice of hundreds of elective courses ranging from manufacturing processes & sciences to data analysis, statistics for data science, data wrangling, project management, 3D CAD modeling, MATLAB, LabVIEW, Tableau, Python, Excel, and more. Electives are included in the program to expand your skill set, strengthen your knowledge, increase your employment marketability, and give you a competitive edge.

### **EXPLORE A FOUR-PART MANUFACTURING** PROCESSES AND SCIENCES OVERVIEW....

- In the first part of this overview, you'll learn about math, 3D printing, CNC machines, measurements, assembly, and other basic topics.
- Continuing on, you'll explore tolerances, blueprints, troubleshooting, quality, machine tools, bending, welding, and screw machining,
- The third part of this overview discusses robotics topics, OSHA, fixtures, mills, lathes, circuits, and similar ideas.
- Round off the four-part overview by diving deep into personal protective equipment, hazard communication, safety precautions, GD&T, high-speed machining, and more.

### **THROUGH OUR PARTNERSHIP WITH** THE SOCIETY OF MANUFACTURING **ENGINEERS (SME), YOU WILL HAVE** THE OPPORTUNITY TO RECEIVE INDUSTRY-RECOGNIZED **CERTIFICATIONS INCLUDING:**

Certified Manufacturing Associate (CMfgA) Certified Manufacturing Technologist (CMfgT) Certified Manufacturing Expert (CMfgE) Total Quality Management (TQM) SME Additive Manufacturing Lean Management Lean Six Sigma

### **CORE CURRICULUM FOR THIS PROGRAM INCLUDES...**

Robotics

Robot Components, End Effectors, Applications, Automated Systems and Controls, Robot Axes, Robot Sensors, Robot Maintenance, Introduction to Robotics, Robot Safety, Robotic Drives, Hardware, and Components, Robot Installations, Robotic Control Systems, Vision Systems, Industrial Network Integration, Robot Troubleshooting, and Concepts of Robot Programming

- Microsoft Visio
- Additive Manufacturing (AM): AM Processes, Methods and Materials, Design for AM, Materials Science, Integrating AM, and Nondestructive Testing for AM
- Introduction to Lean Manufacturing & Six Sigma: Lean Manufacturing, Continuous Process Improvement, Developing & Maintaining a Lean Culture, 5S, Cell Design & Pull Systems, Six Sigma, Kaizen, SPC, Process Flow Charting, Setup Reduction, Total Quality Management, Product and Process Design, Value Stream Mapping, and Transforming Lean into Business Results
- Quality Fundamentals: ISO 9000, ISO 9001, Approaches to Maintenance, Process/Product Design & Development, Equipment/Tool Design and Development, Production System Design and Development, Supply Chain Management, Quality and Customer Service, Conducting an Internal Audit, TS 16949:2009 Overview, and IATF 16949:2016 Overview
- Cybersecurity for Manufacturing: Cybersecurity for Manufacturing, Malware, Industrial Internet of Things (IIoT), Digital Twin, Digital Thread, Machine Learning, and Artificial Intelligence (AI)

### **ADDITIONAL ELECTIVE TOPICS** INCLUDE....

- CNC
- CNC Controls for NGC, Fanuc & Mazak, NIMS, Milling, Metal Cutting, Abrasives, Inspection, Stamping, Press Brake, PLC's, Motor Controls, Materials, Electrical & Mechanical Systems, Hydraulics & Pneumatic Systems, Machine Rigging, Welding, Soldering, Adhesives, Coatings, Assembly & Fasteners, Composites, Foundational Mathematics, and OSHA
- **Robotics, Electricity & Electronics, Control Systems** •
- Robotics Operating Systems (ROS) •
- Robotic Process Automation (RPA) •
- Process Capability Analysis, Flowcharts & Mapping •
- **Quality - TOM (Total Quality Management)** •
- Failure Mode & Effects Analysis (FMEA)
- **Engineering Drawing & Graphics** •
- Physics & Chemistry Fundamentals
- SolidWorks, Mastercam Lathe, Multi-Axis, & Mill
- Revit, Inventor, AutoCAD 2D, Navisworks & SketchUp
- GD&T, Design for Mfg, Additive Mfg & Machining Basics
- Microsoft Office 365 Suite + Visio, Project & SharePoint
- SAP, SQL, MySQL, LabVIEW, MATLAB, & Tableau
- Python, Java, R, PLC, & VBA Programming
- Data Analysis & Science •
- Probability & Statistics

#### To learn more about this program, please visit:

https://www.visible-edge.com/advanced-manufacturing-

technologies/