REV-UP!

TRAININGS OFFERED BY CCAT

Online Training with Mentor Support

Smart Manufacturing – Industrial Internet of Things

This program is designed for those with some manufacturing experience and an affinity for and solid experience with computers and all things digital. The program is **online based** utilizing the industry recognized Tooling University platform and requires the ability to work independently. Progress will be **monitored and supported** by CCAT.

Ask the Mentor
Students will be provided with access to a **CCAT content mentor** via email during the course. A specially provided email address will be active for this purpose during the program providing the opportunity to ask any questions that may arise about the course material and its application.

Timing/ Program Length: *Participants can begin immediately.*
Overall length – Six Weeks. Designed to fit into a work schedule. Training modules are brief and self-paced.

Topics *(Each area/module is about an hour in length):*
Cybersecurity for Manufacturing Basics 101
Cybersecurity for Manufacturing: Malware Overview 102
Introduction to the Industrial Internet of Things 111
Data Collection Fundamentals 121
Automatic Identification Technology 141
Cybersecurity for Manufacturing: Hacking Overview 201
Cybersecurity for Manufacturing: Wireless Networks 202
Introduction to Digital Networks 221
Data Collection: Inventory and Maintenance 231
Introduction to Digital Twin 241
Introduction to Digital Thread 242
Introduction to Machine Learning and Artificial Intelligence 301
Machine Learning and Artificial Intelligence Applications 302

Course Objectives:
Provides a solid grounding on key topics related to the industrial internet of things & smart manufacturing for those aiding with the transition to these technologies or seeking an enhanced understanding of them.

Trainee Skill Level:
Training runs to the intermediate level. Potential candidates should have strong computer skills.

Self-Paced Training

International Traffic in Arms Regulations – ITAR Training

ITR-1001 Introduction to International Traffic in Arms Regulations (ITAR)

The International Traffic in Arms Regulations (ITAR) is a set of U.S. laws that control the export of product and technical data pertaining to military and defense-related technology. In this training, you will gain an understanding of United States arms export control regulations and why they were passed into law. You will also learn about common compliance violations and the penalties that can be incurred when arms regulations are breached.

By the end of this course, you will be able to
• Define International Traffic in Arms Regulations (ITAR)
• Understand the purpose of ITAR compliance
• Identify common ITAR compliance violations
• Describe the penalties for ITAR violations

Online: Estimated completion time (hours): 1
(Credit hour 0.1 / CEU 0.1)

ITR-1003 Implementing ITAR Compliance

It is up to each individual company to comply with the International Traffic in Arms Regulations (ITAR). The ITAR guidelines recommend that organizations adopt a series of processes and procedures to ensure they comply with export control policies and avoid violations. This training contains an overview of the steps necessary to implement an effective ITAR compliance program within your company.

By the end of this course, you will be able to
• Understand the steps necessary to implement and maintain an ITAR compliance program
• Recognize the importance of management commitment
• Determine ITAR jurisdiction and classification
• Learn the requirements for record-keeping
• Understand the process for detecting, reporting, and disclosing violations
• Learn the value of employee training
• Develop risk assessments and audits to monitor compliance

Online: Estimated completion time (hours): 1
(Credit hour 0.1 / CEU 0.1)

Frontline Leadership Training

Frontline Leadership Training is designed to enhance the competence of employees as they progress from primarily technical roles into supervisory and management positions. Multiple delivery modes will be used to enhance engagement: lecturettes, role plays, film analysis and case studies.

Timing/Program Length

5 layered modules to be taken in sequence
3 hours per session
5/2/24, 5/9/24, 5/16/24, 5/23/24, 5/30/24
9 am - 12 pm, 222 Pitkin St, East Hartford

Training Modules

> **Foundational Skills – Emotional Intelligence and Communication**
These skills that are critical to exercising leadership in the workplace. Enhancing your ability to perceive others' emotions and communicate clearly, will enable more complex leadership skills such as Performance Management and Delegation.

> **Performance Management and Effective Feedback**
In this module we provide attendees with the ability to professionally critique someone's performance when that performance is not up to par. Delivering "effective" feedback is a critical component of any leader's job.

> **Conflict Resolution and Negotiation**
The third module will give participants the ability to manage disagreements and conflicts more effectively in the workplace. Participants will learn their own preferred modes of managing conflict and will learn to choose the best approach given the situation.

> **Supervisory Leadership and Delegation**
Participants attending Module 4 will learn to how to assess their employee's abilities and motivation, and then choose the appropriate leadership style for the situation.

> **Team Dynamics and Team Leadership**
The final module focuses upon the best ways to lead a team. Team dynamics and team dysfunctions will be fully explored.

Objective
Enhance the competence of employees as they progress from primarily technical roles into supervisory and management positions and give them the tools needed to succeed.

Instructor: Robert Albright, Ph.D. is a founding partner with AIM Consulting Associates who graduated from the U.S. Coast Guard Academy before receiving his Ph.D. in Human Resource Management and Labor Relations

Rev-up Process Improvement Awareness
Training Program

Program Description:
➢ This program provides participants from all departments with an understanding of the importance of focusing on organization's processes. It provides knowledge, skills and tools that aid process improvement efforts.

➢ **Specific Objectives**:
- Learn Basic Process Mapping Skills
- Understand the Primary Process Improvement Lessons presented in "The Goal" by E. Goldratt
  - o Identifying the Bottlenecks
  - o Elevating the Constraints
  - o Moving QC forward in the Process
  - o Sequencing and Batching
- Manage Process Improvement-oriented meetings
- Practice with "Process Improvement" examples

Program Design:
This program is designed with three sequential sessions lasting 3 hours each.
June 13, 20 and 27. 9:00am-12:00pm

Location: CT Center for Advanced Technology, East Hartford. (Pitkin st location)

Session One:
➢ Process Improvement Principles and Tools
  - o The IPO (Input, Process, Outputs) Model
  - o Identifying the right "Goal" for your Process Improvement Effort
➢ Process Improvement Tools
  - o Process Mapping Logic
  - o Process Chart Symbols
  - o Process Mapping Exercise

Session Two:
➢ Understand the Process Improvement Lessons of Goldratt's "Theory of Constraints
  - o The Goal Video
  - o Review the complications associated with a series "sequential" processes
  - o Identify a sequential set of processes in your workplace
  - o Quality Control
  - o Eliminating Waste
    - ▪ Identifying the Bottlenecks
    - ▪ Elevating the Constraints
    - ▪ Moving QC forward in the Process
    - ▪ Sequencing and Batching Implications

Session Three:
➢ Practicing Process Improvement
  - o Clarifying Roles/RACI Charting
➢ Capstone Event -The Facility Building Exercise (an active experiential exercise where participants practice the principles of "Process Improvement.")
  - o Finding and eliminating process flaws and "bottlenecks"
  - o Summary

REV-UP!
ON-LINE TRAININGS OFFERED BY CCAT

Cybersecurity for Manufacturing

This excellent curriculum developed by the highly regarded Cybersecurity Manufacturing Innovation Institute can provide your employees with a convenient, self-paced introduction to the threats, vulnerabilities, and available preventative measures for securing your organization.

Cyberattacks a r e growing more complex and sophisticated & organizations and their employees need to understand how to raise awareness across their company and take preventative measures.

Preventing cyber- attacks on our supply chain only works when everyone is a part of the solution.

Concise online, self-paced **e-learning** modules designed using CyManII's subject matter expertise and know-how on cybersecurity each module takes about 30 minutes. Available for immediate start

Program Modules & Objectives

Cybersecurity for Manufacturing Basics **101**
This course will help manufacturers and manufacturing personnel understand and identify basic cyber threats.

Cybersecurity for Manufacturing: Malware Overview **102**
After taking this course, users will be able to recognize malware threats and ways to defend against them.

Cybersecurity for Manufacturing: Hacking Overview **201**
After taking this class, users will better understand the cyber threats posed by hackers as well as the tools and strategies to guard against these threats.

Cybersecurity for Manufacturing: Wireless Networks **202**
After taking this course, users will understand a variety of wireless networking options and their general applications, the risks associated with these networks, and effective ways to make these networks more secure.

Cybersecurity: Tools and Methods **205**
After taking this course, learners should understand common cybersecurity tools and standards for cybersecurity best practices. These resources allow organizations to safely participate in and benefit from advanced manufacturing technologies. In addition, they can minimize damage and aid in data recovery after a breach.

REV-UP!

ON-LINE TRAININGS OFFERED BY CCAT

Your REV-UP employees can learn essential technical and professional skills on their own schedule. Select from a library of over 700 online competency-based courses. Choose from the topics and learning pathways below, developed by Connecticut's manufacturing community. Or reach out and we'll work with you to customize your own training plan. Contact Marianne Martinez or Eileen Candels for more information or to register.

Health & Safety	Introduction to OSHA	SAF-1001
	Making Work a Safer Place	SAF-1002
	Help! What to Do in an Emergency	SAF-1003
	Personal Protective Equipment	SAF-1004
	Eye and Face Protection	SAF-1005
	Work Area Safety	SAF-1016
	Hazardous Materials	SAF-1012
	Lockout/Tagout	SAF-1021
	Fire Extinguishers	SAF-1023
Additive Manufacturing	Introduction to 3D Metal Printing	ADM-1002
	Introduction to Powder Bed Fusion	ADM -1003
	Introduction to Binder Jetting	ADM -1004
	Introduction to Directed Energy Deposition	ADM -1005
	Introduction to Bound Powder Extrusion	ADM -1006
	3D Metal Printing Safety	ADM -1007
Non-Destructive Examination	Standard Inspection Techniques	NDE-3006
	Visual Testing Equipment	NDE-3007
	Visual Testing of Castings	NDE -3010
	Visual Testing of Welds	NDE-3012
	Materials	NDE-3039
	Metals Manufacturing and Processes	NDE-3040
	Testing of Material Properties	NDE-3041

Logistics for Manufacturing	Introduction to Logistics	LOG-1001
	Logistics Technology	LOG-1002
	Inventory	LOG-1003
	Distribution and Transportation	LOG-1004
	Safety, Quality, and the Environment in Logistics	LOG-1005
	Successful Logistics	LOG-1006

Technical Documents	Schematics & Prints	DWG-1001
	Engineering Drawing Terminology	DWG-1002
	Engineering Drawing Views	DWG-1003
	Engineering Drawing Lines	DWG-1004
	Dimensions and Tolerances	DWG-1005
	Threads and Fasteners	DWG-2003

Customer Service For Manufacturing	Focusing on Your Customers	CUS-1001
	Providing Friendly, Courteous, and Efficient Service	CUS-1002
	Communicating Effectively with Customers	CUS-1003
	Identifying and Meeting Customer Needs	CUS-1004
	Building Customer Relationships	CUS-1005
	Advanced Customer Service	
	Respecting Diversity in Your Customers	CUS-1006
	Better Serving Customers with Disabilities	CUS-1007
	Dealing with Difficult Customers	CUS-1008
	Responding to Customer Complaints	CUS-1009
	Managing Conflict with Internal Customers	CUS-1010

* These learning pathways are created to help Connecticut employers create, grow, and retain their workforce.

Additional 180 Skills Online Courses

There are hundreds of 180 Skills Online courses to choose from. Contact us to learn about the options that would work best for your REV-UP employees. Contact Marianne Martinez or Eileen Candels to for more information or to register.

A sample of other skill building courses

- Understanding Conflict
- Project Management
- Diversity Equity and Inclusion
- Communicating with Others

- Working as a Team
- Spreadsheets
- Personal Finances
- Shop Math Skills

Some intermediate and advanced skills courses & programs

- **3D Printing**
- Quality Management
- **Composites**
- CNC Machining - Milling
- **Non-Destructive Examination**
- Maintenance Electrical

- **Advanced Manufacturing**
- Maintenance Pneumatics
- Maintenance PLC
- **Automation**
- Statistical Process Control
- **Robotics**