



GREEN ENTERPRISE DEVELOPMENT



Ensuring a sustainable future

Thinking Green

Green Enterprise Development was designed by Purdue's Technical Assistance Program for manufacturers and others interested in learning how to apply sustainable, environmentally friendly practices in the workplace.

This program can provide an entire workforce with hands-on activities, simulations, and case studies to teach environmental sustainability that leads to process improvement. Through the 3-level training certificate program, participants can earn an SME Green Manufacturing Specialist Certificate with accreditation through the Society of Manufacturing Engineers (SME). The program also includes courses to train instructors in the Green Generalist and Green Specialist modules.

"The Green Generalist curriculum is the perfect means for Blackhawk Technical College to serve our business and industry partners in southern Wisconsin. Our faculty and staff learned basic knowledge on environmentally friendly processes and applied it to a practical business simulation. We look forward to sharing this knowledge and application with our students/graduates as well."

DR. SHARON KENNEDY
Vice President of Learning
Blackhawk Technical College
Janesville, Wisconsin

LEVEL 1

GREEN GENERALIST — 8 instructional hours

LEVEL 2

GREEN SPECIALIST — Up to 48 instructional hours
6 modules: Sustainability in Practice, Dumpster Dive, Energy Management, H₂O Conserve, Pollution Solutions, Green Chemistry

LEVEL 3

SME GREEN MANUFACTURING SPECIALIST CERTIFICATE — Earned by passing exam

LEVEL 1

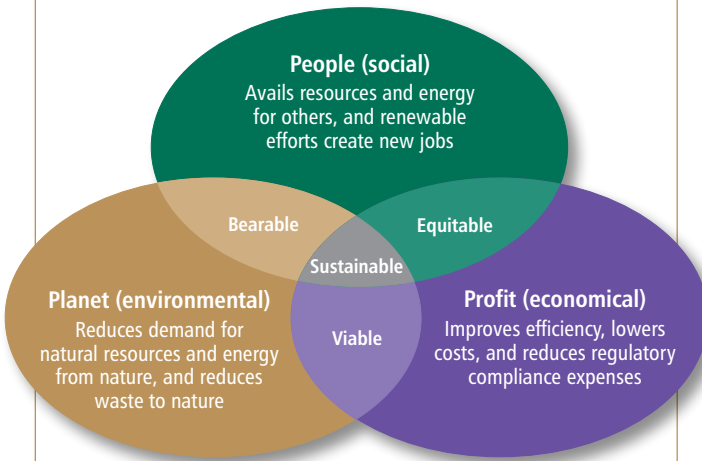
Green Generalist Training (Green 101)

Green Generalist training provides an introductory look at the green movement, with a focus on education, awareness, and methods beneficial to employees at every level of a company or organization.

- One-day workshop combines classroom-style learning with an interactive “live” simulation.
- Participants learn green concepts, key environmental issues facing organizations, and the components of sustainability.
- Workshop is appropriate for company or organization’s entire workforce.
- Program prepares participants for next-level Green Specialist training modules.

Triple Bottom Line

Implementing green-driven sustainability programs makes sense economically, environmentally, and socially:



“Using the tools we learned through the Green Generalist workshop, we formed a green team, identified environmental performance metrics, and are now setting goals. We look forward to continuing our work with Purdue TAP as we head down the green path.”

DONNA ROBERTS
Safety Engineer
Rea Magnet Wire Co.
Lafayette, Indiana

L E V E L 2

Green Specialist Training

- One-day workshop for each of six modules with simulations and case studies for in-depth instruction in applying green concepts and techniques.
- Find better ways to measure environmental progress and how to impact your bottom line.
- Appropriate for plant engineers, industrial engineers, manufacturing engineers, design engineers, level 1 procurement specialists, environmental managers, and green team participants.
- Green 101 is recommended but not required.

Green Specialist Modules

Sustainability in Practice

- Develop the business case for implementing a comprehensive environmental management or sustainability program.
- Topics include how to translate a vision into a continuous and sustainable program, include the supply chain, and measure success.

Energy Management

- Learn how to manage energy usage and invest in energy efficiency to cut energy costs and reduce carbon footprint.
- Basic energy-use and renewable energy alternatives are discussed.

Pollution Solutions

- Program provides innovative methods to improve emission control and environmental management systems, and new technologies to reduce air pollution.
- Gain an understanding of climate challenges related to air emissions and provide strategies for incorporating effective air emissions management concepts into a Green Enterprise.

Dumpster Dive

- Learn fundamentals of solid waste streams and their sources by focusing on the leading methods of waste reduction, known as the 4Rs — Refuse, Reduce, Reuse, Recycle.
- Activities and exercises on lifecycle analysis, alternative material selection, byproduct reduction, waste exchange, and zero landfill.

H₂O Conserve

- Interactive exercises introduce lower-cost practices and conservation principles in operation and design of water systems.
- Learn alternative methods that will reduce costs and conserve an endangered resource.

Green Chemistry

- Hands-on activities focus on how to apply green chemistry principles and techniques throughout the business — from cleaning to machining — to better manage chemical use and chemical waste.
- Learn how to meet regulatory requirements and achieve a healthier, safer environment through interactive exercises about applying green chemistry principles in a business.

Specialist I: Complete three of the six modules.

Specialist II: Complete all six modules to prepare for the SME Green Specialist Certificate Exam.

LEVEL 3

SME Green Manufacturing Specialist Certificate

To earn an SME Green Manufacturing Specialist Certificate with accreditation through the Society of Manufacturing Engineers (SME), participants must pass the SME Green Specialist Certificate Exam.

Recommendations include one of the following:

- Completing all six modules of the Green Specialist Series.
- Completing the three-day SME Green Specialist Certificate Exam Preparation workshop.



The 21st century Green Worker

Green Workers can be in any occupation and in any type of organization:

- They come from every spectrum of the business world and understand the role and goal of sustainability.
- They can identify opportunities and use tools to implement solutions.
- They partake in the continuous improvement process in the workplace.
- They have the knowledge and skills to be active participants in their organization's efforts to implement sustainability methods and processes.

"The Green Generalist Program provides a good overview on the components of a sustainability program. The simulations help to demystify the concepts and break them into elements that can be understood, managed, and implemented."

JOSEPH C. D'URSO
Group Product/Services Manager
New Jersey MEP
Morris Plains, New Jersey

OTHER SERVICES

Green Generalist and Green Specialist Train-the-Trainer

- Two-day workshop in which participants complete the chosen, one-day training and simulation, then spend a second day discussing the key concepts and instruction processes.
- Workshops include training kit with materials for simulation, facilitator guide PowerPoint presentation, and software to print instruction materials.

Green Generalist Online

- Participants learn green concepts and the components of sustainability in convenient, do-it-yourself format that can be completed at your own pace.
- Areas of focus include energy, supply water, material and solid waste, wastewater and air-emissions management.
- Educational format offers seven sections, seven tests and three interactive simulations. It takes up to four hours to complete.

SME Green Specialist Certificate Exam Preparation Workshop

- Three-day review program prepares you for the SME Green Specialist Certificate Exam on day four.
- During this session, you will review the Body of Knowledge and Green Enterprise Development materials, practice exercises, and discuss the exam format.

■ WORKSHOP DATES AND REGISTRATION

www.tap.purdue.edu/green/events

E-mail ■ TAPworkshops@purdue.edu

Phone ■ (800) 877-5182, ext. 620

■ ABOUT US

The Technical Assistance Program, known as TAP, connects companies with Purdue resources and assists them in implementing state-of-the-art technologies. TAP also administers the Indiana Manufacturing Extension Partnership Center, which helps manufacturers implement lean manufacturing, quality systems, marketing, and other initiatives to improve their operations.

■ HOW WE CAN WORK WITH YOU

In addition to Green Enterprise Development, Purdue's Technical Assistance Program offers on-site or public workshops and provides implementation and consulting services.

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UNIVERSITY

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Society of
Manufacturing
Engineers

www.sme.org