

GREEN ENTERPRISE DEVELOPMENT



*Green skills that get real
bottom line results.*

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, Wis.

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

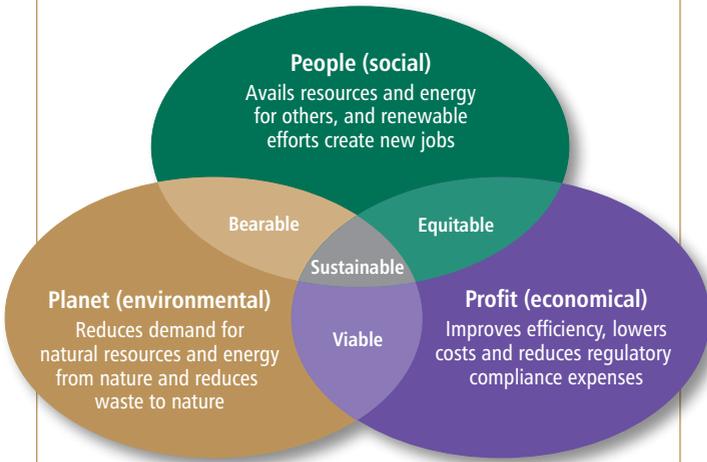
Green Generalist Training (Green 101)

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’s 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:



“Green Enterprise Development’s nationally recognized accreditation through Society of Manufacturing Engineers (SME) provided us with a great tool to be able to show our customers that we’ve had relevant training and we are serious about sustainability. Plus, every workshop I attended provided information, knowledge and tools I could take back to the facility and use right away.”

DARLA CARLISLE
Harlan Bakeries
Corporate Compliance Manager

LEVEL 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.

L E V E L 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 Green Specialist Certificate Exam Preparation workshop.

"Our clients are really starting to understand the need to put sustainability in their top level strategies. It's not just a "feel good thing" to show we care about our planet but instead they realize that sustainability has real bottom line impact. Profitability is one of the concepts that we teach and one we've learned during the GreenEd training."

CHRIS HAYES
Senior Field Engineer
Utah Manufacturing
Extension Partnership



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.

OTHER SERVICES

Train-the-Trainer

- Available for the green generalist, green specialist and waste stream mapping programs, participants complete the chosen, one-day training and simulation, then spend a second day discussing the key concepts and instruction processes.
- The workshops include training kit with materials for simulation, facilitator guides, 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.
- Areas of focus include water conservation, air emissions, solid waste, toxic materials and energy management.
- Educational format offers seven sections, seven tests and three interactive simulations. It takes up to four hours to complete.

Green Specialist Certificate Exam Preparation Workshop

- This three-day review program prepares you for the SME Green Specialist Certificate exam on day four.
- Review the Body of Knowledge and Green Enterprise Development materials, practice the exercises and discuss the exam format.

Waste Stream Mapping Elective

- Learn how processes create waste and where opportunities exist to reduce or eliminate waste, thereby helping the environment and your bottom line.
- This two-day workshop is appropriate for engineers, environmental managers and green project teams.



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■ 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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Engineers

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