Advanced Technology Centers: Accelerating Industry Growth

NCATC Fall Conference
October 3-5, 2012 • Racine, Wisconsin

Hosted by: GATEWAY TECHNICAL COLLEGE
Welcome to Gateway Technical College

It is my pleasure to welcome you to our college and to our community. It is our hope that throughout your visit you will have a memorable Gateway experience. As Gateway begins a journey into its second century of education and training services, I think you will be as proud as we are in the role that NCATC has played in building a base of innovative partnerships that are leading us on this journey.

As President of Gateway Technical College, I have watched the development of our five technology centers and the impact they have made on our students, faculty, and business partners. Our conference planning team has worked hard to ensure your visit is professionally rewarding by sharing best practices and techniques to sustain national training partnerships and embed industry certifications into curriculum and training.

Hosting the NCATC conference is an honor and we thank NCATC member colleges for your leadership and participation. While our time together may be short, please consider Gateway your campus while you are here and enjoy the special history of the Racine community.

Sincerely,

Bryan D. Albrecht, Ed.D.
President, Gateway Technical College

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2012 NCATC Fall Conference

Schedule at a Glance

Wednesday, October 3 (Events at Racine Marriott)
- 9:00 – 10:00 a.m.  Continental Breakfast
- 9:00 a.m. – 6:00 p.m.  Exhibits Open
- 10:00 – 11:00 a.m.  Opening Session: Tom Burke, President and CEO, Modine Manufacturing
- 11:15 a.m. – 12:15 p.m.  Concurrent Sessions
- 12:30 – 1:30 p.m.  Lunch Buffet and Roundtable Discussions
- 2:00 – 3:00 p.m.  Concurrent Sessions
- 3:00 – 3:30 p.m.  Refreshment Break
- 3:30 – 4:30 p.m.  Concurrent Sessions
- 4:45 – 6:00 p.m.  Reception with Exhibitors

Thursday, October 4 (Events at Racine Marriott and Industry Locations)
- 8:00 – 9:30 a.m.  Breakfast and NCATC Business Meeting
- 8:00 a.m. – 12:00 p.m.  Exhibits Open
- 9:45 – 10:45 a.m.  Concurrent Sessions
- 11:00 a.m. – 12:00 p.m.  Concurrent Sessions
- 12:15 – 1:30 p.m.  Lunch/Business Incubation: Industry Best Practices Panel
- 1:45 – 4:00 p.m.  Industry Tours (One of the following):
  • Snap-on  • SC Johnson  • Modine Manufacturing
- 4:30 – 5:30 p.m.  Reception
- 5:30 – 6:30 p.m.  Dinner with Speaker: Nick Pinchuk, President and CEO, Snap-on Incorporated

Friday, October 5 (Events at Racine Marriott and Gateway Technical College)
- 8:00 a.m. – 9:00 a.m.  Breakfast and Presentation
- 9:15 a.m. – 12:00 p.m.  Tours of Gateway Advanced Technology Centers (All of the following):
  • iMET Center  • Horizon Center  • Center for Sustainable Living
  • Pike Creek Horticulture Center  • Renewable Energy Labs
- 12:00 p.m.  Box lunch provided
- 12:30 p.m.  Conference adjourns

Racine Marriott Meeting Rooms

![Meeting Room Layout Diagram]
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00–10:00 a.m.</td>
<td>Continental Breakfast</td>
<td>Prefunction Lobby</td>
</tr>
<tr>
<td>9:00 a.m.–6:00 p.m.</td>
<td>Strategic Partner Alliance Exhibits Open</td>
<td>Ballrooms B, C, and D</td>
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<tr>
<td>10:00–11:00 a.m.</td>
<td>Opening General Session: Modine Technology Driver Process: Identification and Management of Product Platform Innovation Opportunities</td>
<td>Ballroom A</td>
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<tr>
<td>11:15 a.m.–12:15 p.m.</td>
<td>Concurrent Sessions: Performing a Curriculum Gap Analysis: How and Why</td>
<td>Erie</td>
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<td>Using the Hands-On Approach for Intelligent Lighting Systems, Energy Conservation, Micro-grids and Other Concepts for Advanced Technology Centers</td>
<td>Huron A</td>
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<td>Changing the Game—Adding Industry Credentials to Academic Programs</td>
<td>Ontario</td>
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<tr>
<td></td>
<td>e-Bike Danville and Light Electric Vehicle Certification</td>
<td>Huron B</td>
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**Erie**

**Performing a Curriculum Gap Analysis: How and Why**
This presentation will focus on the CARCAM curriculum gap analysis (CGA), a process that ensures Automotive Manufacturing program content meets current industry needs and standards by using industry representative subject matter experts to review and provide feedback on current course offerings. Information gathered in this process assists with curricula changes, additions, and further review of curriculum content. This model also aids in building stronger relationships with industry partners.

**Presenters:** Walt Simmons, CARCAM/Gadsden State Community College; Ted Davis, Alabama Department of Postsecondary Education

**Huron A**

Milwaukee Area Technical College’s Center for Energy Conservation and Advanced Manufacturing (ECAM) is continuing to develop cutting-edge courses on sustainable facility operations while installing the associated technology onsite. New courses from ECAM include Energy Modeling, Intelligent Lighting Systems, Advanced Cx, and Micro Grids. Come learn more about these innovative courses.

**Presenters:** Ted Wilinski, Center for Energy Conservation and Advanced Manufacturing/Milwaukee Area Technical College; Dr. Joe Jacobsen, Milwaukee Area Technical College

**Ontario**

**Changing the Game—Adding Industry Credentials to Academic Programs**
The Florida Advanced Technological Education Center of Excellence (FLATE) in conjunction with the Florida Department of Education has developed a statewide plan for technical education in Florida. The flexible plan includes opportunities of alignment and articulation of industry credentials and certifications. This presentation will share how the plan works and how it’s being implemented in Engineering Technology Associate of Science degrees across the state.

**Presenters:** Marilyn Barger, Richard Gilbert, and Brad Jenkins, FLATE

**Huron B**

**e-Bike Danville and Light Electric Vehicle Certification**
Learn how Danville Community College (DCC) has embarked on a project to test the feasibility of e-bikes as a basic mode of transportation. Also, learn how DCC plans to use e-bikes in teaching the LEVA (Light Electric Vehicle Association) Technician Certification.

**Presenters:** Jerry Franklin, Danville Community College (VA); Don Gerhardt, Gerhardt Engineering Company; Jeff Liverman, DSC
Wednesday, October 3

12:30–1:30 p.m.  
**Lunch and Roundtable Discussions:**

*Ballroom A*

Join your colleagues for a lunch buffet and roundtable discussions on timely topics of interest. A partial list of topics that will be facilitated is below.

- Aerospace/autonomous technology
- LEAN manufacturing practices
- Industry success stories
- Non-education resources and services provided by ATCs
- Grants and other funding streams that support Technology Centers

2:00–3:00 p.m.  
**Concurrent Sessions:**

*Erie*

**Innovative Blended Learning “Blends” That Delight Customers and Grow Revenues**

With the expanding need for customized training, reduced time availability for classes, and increasing pressure on budgets, dozens of community colleges find that The Quality Group’s blended learning platform, OpusWorks®, and wide-ranging e-Learning curriculum gives them the flexibility to deliver innovative and profitable training solutions that leverage technology, meet exact customer needs, and align with budget and business realities.

*Presenters: Rob Stewart, The Quality Group; Rick Lofy, Gateway Technical College; Jerry Franklin, Danville Community College*

*Huron A*

**FABLAB: A Tool to Support STEM, Entrepreneurship and Innovation**

Mott Community College’s Digital Fabrication Lab (FABLAB) is a resource for students, residents, and businesses seeking to develop and refine product ideas. This presentation will address access models for each group of users and speak to Mott’s participation in the Virtual Incubation Network funded by AACC and the Charles Stewart Mott Foundation to encourage community colleges to become more active in innovation and entrepreneurship.

*Presenter: Thomas Crampton, Mott Community College*

*Ontario*

**Evolution and Overview of Composite Materials**

This presentation will feature a discussion on where composites began, how they have evolved, and the variety of materials and manufacturing techniques used in numerous industries. A brief introduction to St. Louis Community College’s Center for Workforce Innovation, the St. Louis Aerospace Institute, and its partnerships with local industries will also be included.

*Presenters: Becky Epps and Joanne Fountain, St. Louis Community College*

*Huron B*

**Bringing Geothermal Training to Technical Education**

Gain an understanding of geothermal and how it fits into the renewables puzzle. Learn the steps Gateway took to establish its unique program and the pitfalls along the way.

*Presenter: Tom Niesen, Gateway Technical College*
Wednesday, October 3

3:00–3:30 p.m.
Ballrooms B, C, and D

**Refreshment Break**

3:30–4:30 p.m.

**Concurrent Sessions:**

**Erie**

**Computer Integrated Manufacturing Mobile Training Lab**
This presentation will describe Northeast Wisconsin Technical College’s mobile training lab for Computer Integrated Manufacturing. The purpose of the lab, what it consists of, and how it works will be discussed. The lab itself will be available for viewing.

**Presenter:** Pam Mazur, Northeast Wisconsin Technical College

**Huron A**

**Going Mobile: A Strategy to Provide Training On-site**
Many industrial customers request on-site training. A cost efficient way to provide this is through the use of portable training apparatus, combined with on-line, or self-paced content delivery. This seminar will explore several approaches to solving this recurring dilemma for educators.

**Presenter:** David Dahline, Amatrol, Inc.

**Ontario**

**Making Lean Stick: A Five-Stage Process of Organizational Transformation**
Lean manufacturing processes are being aggressively applied across a wide variety of industries, ranging from the birthplace of Lean manufacturing, to healthcare to retail. In the majority of cases, these attempts to harness the power of Lean will fail. This seminar describes a five-stage process that will make Lean stick, ensuring that an organization’s investment in Lean delivers the ROI that was hoped for when the organization began its Lean journey.

**Presenter:** George Friesen, St. Louis Community College

**Huron B**

**Using NCATC’s Member Services**
Facilitated by NCATC’s Member Services Committee, this session will feature a panel of member institutions that have benefited from NCATC’s Membership Assistance Program (MAP) and grant evaluation services. Learn more about how these services can support the needs of your college.

**Presenters:** Don Robison, St. Louis Community College; Jeff Arnold, Danville Community College

4:45–6:00 p.m.
Ballrooms B, C, and D

**Strategic Partner Alliance Exhibit Reception**
Thursday, October 4

8:00–9:30 a.m.
Ballroom A
Breakfast/NCATC Business Meeting and Elections
SolidWorks and STEM Academy Announcement

8:00 a.m.–12:00 p.m.
Ballrooms B, C, and D
Strategic Partner Alliance Exhibits Open

9:45–10:45 a.m.
Concurrent Sessions:

Erie
Leading Transformative Partnerships at the Confluence of Community Engagement, Economic Development, and Advanced Technology
Gulf Coast State College embarked upon a comprehensive community engagement approach in the planning of its $35 million Advanced Technology Center. This transformative facility demanded the collaboration of business, industry, government, and education to meet rapidly evolving economic development and workforce training needs across the panhandle of Florida and beyond. Join college board members and personnel as they share the strategies implemented in the creation of this unique project merging innovation, advanced technology, and entrepreneurialism.
Presenters: Stephen Dunnivant and Jeff Stevenson, Gulf Coast State College

Huron A
Soft Skills Training—A New Approach with Breakthrough Results
Employers still aren’t satisfied with the basic “soft” skills of their prospective employees. During this presentation, we will explore how your college can integrate an interactive e-Learning program called WinAt-Work – a one-of-a-kind series with the production value equivalent to that of a full-length movie – with technical skills training to delight employers with breakthrough results from your Career and Technical Education programs.
Presenter: Carol Dierdorff, The Quality Group; Jerry Franklin, Danville Community College

Ontario
Partnering to Fill the Skills Gap and Grow Manufacturing Businesses
The college and our regional WorkSource Center have partnered to screen interested individuals to participate in intensive job preparation training programs. This highly competitive screening process is designed to enhance the success of those trainees who are selected into the program. By maximizing the thoroughness of the selection and training process, the programs have been able to place individuals into entry-level positions despite their lack of prior manufacturing experience.
Presenter: Joe Klocko, College of the Canyons

Huron B
It All Adds Up: The Science of Additive Manufacturing
Additive Manufacturing is rapidly becoming the “new technology.” Learn about the global standards and core competencies being developed; how these will affect current and future education and training programs; and how you can participate to ensure you have a say in the future of additive manufacturing.
Presenters: Frank Cox, Technician Education in Additive Manufacturing; Ken Patton, National Center for Rapid Technologies; Mel Cossette, National Resource Center for Materials Technology Education
Thursday, October 4

11:00 a.m.–12:00 p.m. 

**Concurrent Sessions:**

**Erie**

**Accelerate Competence—Enhance Quality—Increase Productivity**
Redefining the functions of a community’s college starts with burying embedded medieval approaches to delivering competence. Reactions to a community’s workforce requirements have to be achieved in close collaboration with employers while responses have to be delivered in a business time frame, i.e., weeks and not years. Join us at Casino NCATC as we share some of the tools and techniques we have developed to provide timely, accelerated and contextualized competency building programs.

*Presenters: John Calver and Gary Randall, Thomas Nelson Community College*

**Huron A**

**Rural Business Incubation—It’s More Than Just Hatching Chickens**
Rural entrepreneurs struggle to find the assistance and resources available to urban entrepreneurs. Virtual assistance through a web-based platform along with a network of experts willing to share their help to promote business growth and regional economic stability is the key.

*Presenter: Philip Everhart, Northeast Wisconsin Technical College*

**Ontario**

**Connecting Local Employers with Electronics and Telecommunications Certifications**
In this session you will learn how to match local companies and organizations to national certifications that enable business growth. Certifications in design, installation and support of voice, data, electronic safety and security, and audio/video technologies are an employer’s natural connection to your training classes, programs, and successful completers.

*Presenters: Randal Reusser and Debbie Davidson, Gateway Technical College*

**Huron B**

**Building Energy Partnerships—Collaboration Between Trane and Gateway Technical College**
Employers across the country are desperately seeking workers with the technical and cognitive skills to master new technologies and solve a broad range of energy-related challenges. This presentation will highlight the innovative partnership established between Gateway Technical College and Trane USA and discuss some of the collaborative ways that education and industry are coming together to close the skills gap while preparing students for jobs within the HVACR and energy services sector.

*Presenters: Gregory Josefchuck, Trane; Larry Hobbs, Gateway Technical College*
Thursday, October 4

12:15–1:30 p.m.  
**Lunch and Panel Presentation:**  
**Business Incubation: Industry Best Practices**  
*Panel moderated by Tracy Kitts, CEO, National Business Incubation Association (NBIA)*  
**Featured Panelists:**  
Southeastern Institute of Manufacturing and Technology (SiMT)—Advanced Manufacturing Center and Manufacturing & Business Incubator: Jack Roach, Director  
As facilities that provide qualified startup manufacturers assistance in commercializing their ideas, Roach will discuss business incubation as a technology solution offering manufacturing space, infrastructure, and intellectual property development to startup companies.  
Northeast Wisconsin Technical College, Virtual Business Incubation Project: Philip Everhart, Coordinator  
Everhart will discuss developing rural partnerships and the collaborative efforts critical to making a virtual business incubation network a success; putting together a website that provides entrepreneurs easy access to local resources; and a Mott Foundation initiative that developed a Virtual Incubator Network Toolkit for colleges and business development organizations to set up their own Virtual incubator program.  
Gateway Technical College, integrated Manufacturing and Engineering Technology (iMET) Center: Therese Fellner, Director of Business Development  
Transitioning from an advanced technology business incubation facility to a regional manufacturing center to include business growth and acceleration programs, Fellner will discuss the strategies used to frame the vision and the key partnerships necessary to execute and sustain them. As President of the Wisconsin Business Incubation Association (WBIA), Fellner will also discuss the partnership among Gateway, WBIA, and the Wisconsin Economic Development Corporation in developing an 11-site statewide business incubator videoconference network.

1:45–4:00 p.m.  
**Industry Tours**  
Following lunch, the industry tour buses will depart from the main entrance of the Racine Marriott at 1:45 p.m. Buses will be marked with their industry tour destination: Snap-on, Modine, or SC Johnson. Please board the bus for the tour you selected in your conference registration. Buses will return to the Racine Marriott by 4:00 p.m.

4:30–5:30 p.m.  
**Reception**  
Prefunction Lobby

5:30–6:30 p.m.  
**Dinner with Speaker:**  
**Education, Business, and the American Way**  
*Nick Pinchuk*  
*Chairman, President, and CEO, Snap-on Incorporated*
Friday, October 5

8:00–9:00 a.m. Breakfast and Presentations:

**Ballroom A**

**Welcome**

*Bryan Albrecht, President, Gateway Technical College*

**Opening Remarks**

*Leo Reddy, Chairman and CEO, Manufacturing Skills Standards Council*

**Featured Presentation: Milwaukee Water Initiative**

*Elizabeth Thelen, Advisor of Talent Development, Milwaukee Water Council*

9:15 a.m.–12:00 p.m. Advanced Technology Center Tours:

**Gateway Technical College**

Following breakfast, buses will depart from the main entrance of the Racine Marriott at 9:15 a.m. and travel to the Gateway Advanced Technology Centers listed below. The buses will return to the Racine Marriott by 12:00 p.m. where box lunches will be provided.

Currently undergoing a major expansion, Gateway’s integrated Manufacturing & Engineering Technology (iMET) Center will house the state-of-the-art equipment required to provide skilled worker training such as CNC machining and other manufacturing-related Boot Camps in addition to customized training for incumbent workers. The Center is focused on promoting business development, workforce development, and technology innovation in southeast Wisconsin.

The Horizon Center for Transportation Technology provides the nationally recognized vehicle training that has been the hallmark of the center since its inception in 2007, focusing on automotive, diesel, and related “green” technologies. Students receive hands-on training and instruction on advanced propulsion methods such as hybrid biodiesel and electricity. In partnership with Snap-on, Incorporated, the Horizon Center boasts the first national certification center for vehicle diagnostics and houses the National Coalition of Certification Centers (NC3).

Gateway’s Renewable Energy Labs prepare students for careers in geothermal heating, wind power, and sustainable energy systems. HVAC faculty worked with Trane, Inc. to develop, implement, and integrate certifications for technicians. Students receive hands-on training in geothermal systems drilling, installation, and maintenance.

The Center for Sustainable Living provides an environmentally conscious place for project-based, interdisciplinary learning. It offers a living and learning laboratory for students and a meeting place for staff; enables outreach to the community through tours, workshops, group activities, and meeting space for green-focused organizations; and supports outreach to K-12 school districts through field trips and hands-on projects.

The Pike Creek Center is the home of Gateway’s horticulture programs. Remodeled in 2012, the Center’s greenhouse, labs, classrooms, and retail space provide opportunities for Gateway’s sustainable living and urban gardening programs.

12:00 p.m. Return to Marriott/Box Lunches Available

12:30 p.m. Conference Adjourns
Thank You, Conference Sponsors!

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Special Thanks to the 2012 Fall Conference Planning Team at Gateway Technical College:

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