MONROE COUNTY COMMUNITY COLLEGE

TECH UPDATE

NEWS FROM THE APPLIED SCIENCE AND ENGINEERING TECHNOLOGY DIVISION

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INSIDE

$17-Million Career Technology Center Opens

$17-MILLION CAREER TECHNOLOGY CENTER OPENS

Monroe County Community College officials formally opened the new Career Technology Center during a ribbon cutting ceremony August 26 in front of the main entrance to the $17 million, 60,000-square foot facility.

Students began taking classes in the building on August 29, the first day of Fall Semester.

The Career Technology Center provides infrastructure to support state-of-the-art classrooms and lab space required to deliver instruction and skills necessary to secure high-growth, high-demand and high-paying jobs, said MCCC President Dr. Kojo A. Quartey.

It allows for the updating and expansion of existing programs previously housed in the East and West Technology buildings, which had become inadequate to meet modern technology needs.

These include program areas such as nuclear engineering, welding, construction, computer-aided drafting and manufacturing, electronics, mechanical engineering and automation, quality assurance, and automotive engineering and service with an emphasis on hybrid and battery technology.

In addition, the Career Technology Center provides facilities and equipment necessary for the development of programs in the emerging areas of advanced manufacturing; renewable energies such as wind, solar and fuel cell technology; and sustainable and green technologies.

To open the Ribbon Cutting Ceremony, MCCC President Dr. Quartey pulled up in an electric car designed and built by the college's electronics students under the instruction of Assistant Professor of Electronics and Computer Technology Tom Harrill.

"This is a highly impressive and expansive facility for our applied science and engineering technology programs," said MCCC Board Chairman William J. Bacarella Jr.

"The opening of the Career Technology Center accomplishes several objectives that are inherent in our mission, such as preparing students for meaningful employment via one- and two-year programs in technical fields, as well as partnering with employers, governmental institutions and other organizations to provide educational programming that meets the needs of an evolving economy."

"As we look forward to celebrating the 50th year of Monroe County Community College at the end of this academic year, the opening of the Career Technology Center marks another very important milestone in the rich history our college has of enriching lives in this community," said MCCC President Dr. Kojo A. Quartey. "This facility is all about preparing our students for tomorrow and being responsive to the needs of Monroe County."

From left, MCCC Board Vice Chair William H. Braunlich, Trustee Mary Kay Thayer, Trustee Marjorie A. Kreps, Board Chair William J. Bacarella Jr., Trustee Dr. James E. DeVries, Board Secretary Linda S. Lauer, Trustee Joseph N. Bellino Jr., President Emeritus Dr. David E. Nixon and President Dr. Kojo A. Quartey cut the ribbon to officially open the college's new Career Technology Center.

CONTACT INFORMATION

DEAN
Parmeshwar Coomar
pcoomar@monroeccc.edu
734-384-3409

ADMISSIONS & GUIDANCE
Mark Hall
mhall@monroeccc.edu
734-384-4261

APPRENTICE PROGRAMMING/ ADMINISTRATIVE ASSISTANT
Cameron Albring
calbring@monroeccc.edu
734-384-4112

AUTOMOTIVE ENGINEERING
Don Kehrer
dkehrer@monroeccc.edu
734-384-4117

CONSTRUCTION MANAGEMENT
Alex Babycz
ababycz@monroeccc.edu
734-384-4116

ELECTRONICS/ELECTRICITY
Tom Harrill
tharrill@monroeccc.edu
734-384-4115

MECHANICAL DESIGN
Dean Kerste
dkerste@monroeccc.edu
734-384-4121

MECHANICAL ENGINEERING
Martin Dubois
mdubois@monroeccc.edu
734-384-4120

NUCLEAR ENGINEERING TECHNOLOGY
Martin Dubois
mdubois@monroeccc.edu
734-384-4120

PRODUCT & PROCESS TECHNOLOGY
Bob Leonard
bleonard@monroeccc.edu
734-384-4114

QUALITY SYSTEMS & METROLOGY
Parmeshwar Coomar
pcoomar@monroeccc.edu
734-384-4209

RENEWABLE ENERGY
Alex Babycz
ababycz@monroeccc.edu
734-384-4116

WELDING & MATERIALS TECHNOLOGY
Roop Chandel
rchandel@monroeccc.edu
734-384-4165

DIVISION GETS NEW NAME

The Industrial Technology Division has been renamed the Applied Science and Engineering Division. The name change was approved by each of the three councils of the college's Institutional Governance structure, and reflects that the division is delivering instruction necessary for students to develop the skill sets required by today's high-demand, high-skill jobs, said Parmeshwar (Peter) Coomar, dean of the division. He noted that the name change was timely as it came just prior to the division's move into its brand new home in the state-of-the-art Career Technology Center.

LEFT: U-57 FEDCO Hydroplane racing boat trailer.
BOTTOM: Paul Larmor of FEDCO works on the hydroplane racing boat engineered and marketed by the company.

ASET Dean Gets Firsthand Look at FEDCO Hydroplane Racing Boat

Parmeshwar (Peter) Coomar, dean of the Applied Sciences and Engineering Technology Division, toured Monroe's Fluid Energy Development Company (FEDCO) in late May and got a firsthand look at the U-57 unlimited hydroplane racing boat that is engineered and marketed by the company. The U-57 FEDCO Hydroplane Racing Team races the boat in the H1 Unlimited Series. The boat is owned and driven by veteran racer N. Mark Evans, who was at the helm of it in the 104th annual DYC Detroit APBA Gold Cup event in July.

MCCC, DTE ENERGY APPROVED TO ISSUE NATIONAL ACADEMY FOR NUCLEAR TRAINING CERTIFICATES

The Nuclear Uniform Curriculum Program, which is managed by the Nuclear Energy Institute, approved the partnership between DTE Energy's Fermi 2 Atomic Power Plant and Monroe County Community College to issue National Academy for Nuclear Training certificates.

MCCC and DTE Energy successfully passed the "Challenge Board" made up of members from NEI and the Institute of Nuclear Power Operations, as well as nuclear power plant operators and educators involved in the NUCP program, and can now issue the Nuclear Uniform Curriculum Program certificates to eligible graduates of the college's nuclear engineering technology program.

MCCC is now among a select few colleges in the nation eligible to offer the NANT certificates to graduates.

The MCCC team was represented by Dubois and Director of Admissions and Guidance Services Mark Hall, with Parmeshwar (Peter) Coomar, dean of the Applied Science and Engineering Technology Division, and Cameron Albring, administrative assistant for the ASET Division, providing external support. DTE Energy was represented by Jim Davis, Kevin Dahm, Bonnie Masserant and Mary Anne Casha.

This result is the culmination of a two-year process of curriculum development, program planning and resource acquisition. The process was supported by DTE Energy, and adjudged by third-party evaluators from industry and professional societies.

Monroe County Community College hosted a small ceremony in July for the first two students to earn certification in the Nuclear Uniform Curriculum Program. From left is Dr. David Nixon, who retired as MCCC president at the end of July; Dr. Kojo Quartey, who became president of MCCC August 1; Kevin Dahm, an instructor in the program and employee at Monroe Power Plant; Scott DeJonghe, a recent MCCC graduate who earned the NUCP certification; Bonnie Masserant of Fermi 2 Training; and Fermi 2's Training Manager James Davis. Tyler Spleen, who also earned an NUCP certificate, could not attend the ceremony.

Kerste Presents MCCC Case Study at SolidWorks World Conference, Earns Expert Certification

Dr. Dean Kerste

Dr. Dean Kerste, professor of mechanical design technology, presented a case study at the SolidWorks World 2013 conference on how Monroe County Community College addressed the needs of area employers by developing classes that prepare students for the Certified SolidWorks Associate and Certified SolidWorks Professional exams. SolidWorks is 3D parametric modeling software that is widely used in mechanical design and engineering applications. In addition, Kerste outlined how the CSWA and CSWP certifications meet the Carl D. Perkins Core Indicators of Performance.

The SolidWorks Conference provides attendees the opportunity to choose from more than 200 technical training sessions led by SolidWorks users and industry experts. Attendance also includes access to more than 100 exhibitors displaying the latest 3D CAD technology.

Kerste recently earned Certified SolidWorks Expert certification, which is the highest level of proficiency in using SolidWorks. He now is the only educator in Michigan who is a CSWE. SolidWorks certifications are competency-based, timed exams covering various aspects and difficulty levels of the program. In order to qualify for the CSWE certification, an individual must first achieve Certified SolidWorks Professional certification and also pass four of six advanced certifications.

SolidWorks 2013 World Conference

Student Profile: **ANDY DREIER**

Andy Dreier, a 2011 graduate of the automotive engineering technology program, is now working on a bachelor's degree in mechanical engineering at the University of Toledo. He is on schedule to graduate in the spring of 2015.

In the meantime, Dreier said he is interviewing for internships opportunities and enjoying the experience of living on campus, attending sporting events and working on UT's Formula SAE race car. When Andy looks back at MCCC, he comments on what an incredible education he obtained at the college and his favorite class, the SAE Formula Car project in which he and other students built an electric car that was featured at the Career Technology Center's groundbreaking. During Andy's downtime, he volunteers his time at events promoting the automotive and construction industry, attends stock car racing events and helps out on his grandfather's farm.

MCCC and ASET Division graduate Andy Dreier

BABYCZ ATTENDS MIDWEST RENEWABLE ENERGY ASSOCIATION'S INSTRUCTOR INSTITUTE

Alex Babycz, assistant professor of construction management technology, attended solar/photovoltaic training at the Midwest Renewable Energy Association's Instructor Institute, which took place at Northwest Michigan College in Traverse City in May. The training was a combination of four weeks of online instruction, in addition to the lecture and lab-based program at NMC. The Instructor Institute was followed by an Advanced PV Installation course, which provided real world installation experience on two grid interactive PV systems on the NMC campus.

Alex Babycz investigates the battery lab during the Midwest Renewable Energy Association's Instructor Institute.

ASET Division Joins Collaborative to Improve and Increase Automotive and Manufacturing Skills

Dean Parmeshwar (Peter) Coomar and the faculty of the Applied Science and Engineering Division are now part of an automotive workforce collaborative designed to improve and increase automotive and manufacturing skills through the delivery of core mechatronics/maintenance technical education.

MCCC became part of the Automotive Manufacturing Technical Education Collaborative in January.

The partnership also increases postsecondary institutions' abilities to meet industry needs and validate that college curricula are aligned to industry-endorsed skills standards.

For more information, visit the AMTEC Web site at http://autoworkforce.org/Our_Partners

MCCC Taps Larmor as Automotive Consultant

MCCC has hired a National Automotive Technicians Education Foundation automotive consultant, Jack Larmor.

Larmor has been in the automotive field for 30 years, and has worked in academia for the last 15 years as an automotive instructor, program coordinator and automotive consultant. He is an ASE Certified Master Automotive Technician with over 120 hours of Hybrid vehicle training that qualifies him as a Hybrid vehicle technician. In addition, he works an evaluation team leader reviewing automotive service technology programs for compliance to NATEF standards.

Larmor holds an associate degree in automotive technology and a bachelor's degree and MBA in human resource management. He also owns Automotive Training Consultants, a company that offers training to technicians in hybrid technology and basic car care courses to vehicle owners, as well as consults with schools about curriculum and program development.

Jack Larmor

Coomar, Dubois Attend AMTEC Spring Academy, Tour Tennessee Nissan Plant

In April, Dean of the Applied Science and Engineering Division Parmeshwar (Peter) Coomar and Marty Dubois, assistant professor of mechanical engineering technology, attended the Spring Academy of the Automotive Manufacturing Technical Education Collaborative in Smyrna, Tenn.

The academy, hosted by the Tennessee Technology Center, was held at the Nissan North America Facility.

Topics focused on preparing high school and college students for employment in manufacturing fields, as well as what colleges and industry are doing to increase the skill set of incumbent workers.

The academy included a tour of the Nissan manufacturing facility, which has an annual production capacity of 550,000 vehicles and represents a capital investment of $2.5 billion.

The plant produces the Nissan Altima, Maxima, Xterra, Frontier and Pathfinder, as well as the Infiniti JX. Recently, the plant expanded to begin production of the Nissan Leaf, an all-electric vehicle. More than 8,000 people are employed there, and the plant is a major economic force in central Tennessee.

The Nissan plant in Smyrna, Tenn.

MCCC's involvement with AMTEC facilitates training and education for those students seeking entry into manufacturing, as well as helps the college build skills for those already employed in the field. AMTEC also is involved in comprehensive certification of students who have completed training and is a direct benefit to local industry.

CHANDEL NOW A CERTIFIED VISUAL TESTING INSPECTOR

Dr. Roop Chandel obtained Central Certification Program Level II certification from the American Society for Nondestructive Testing and is now a Certified Visual Testing Inspector. In addition, he attended a course on visual testing by Quality Test in St. Louis in January through Fund for the Improvement of Postsecondary Education II grant funds.

AGREEMENT ALLOWS CONSTRUCTION APPRENTICES TO APPLY 32 CREDITS TOWARD MCCC DEGREE

MCCC has signed an articulation agreement with the Detroit Carpentry Joint Apprenticeship Training Committee that will allow construction apprenticeship certificate holders to apply 32 credits toward a construction management technology or general technology degree.

The agreement is entitled "Pathways to Apprenticeship and Construction Technology."

UNIGRAPHICS NX COURSE NOW AVAILABLE VIA SIEMENS GRANT

Through a Siemens UG/NX grant in the amount of $11,700, the Applied Science and Engineering Technology Division began offering a Unigraphics NX (Siemens PLM software) course. The course, Introduction to UG/NX (METC-172), was introduced for the Fall 2013 Semester. The grant will provide for unlimited seats, as well as free training and tech support for the institution.

MCCC HOSTS DEPARTMENT OF LABOR APPRENTICESHIP SESSION

The Applied Science and Engineering Technology Division hosted a U.S. Department of Labor, Office of Apprenticeship Information Session during the Winter Semester for more than 50 representatives from industry and the community at large. The ASET Division currently has more than 20 active apprentices. In addition, an ASET Division apprenticeship Web page was launched and can be found at http://www.monroeccc.edu/industrial/apprenticeship.htm

Final Grant-funded Welding Training Held

MCCC offered its final grant-funded welding training through the Department of Labor Community-Based Job Training Grant in December. The grant performance period ended on January 31, culminating in 24 grant-funded welding certification courses offered on the college's Main Campus and at the Welding Center of Expertise on Hurd Road over the lifetime of the grant. The CBJT grant certified 238 participants in AWS-QC-10, AWS QC-11 or both. The goal was 204. As a result of the grant, more than 100 students are now employed in the welding, fabrication and manufacturing fields, while others are pursuing an associate degree in welding.

The grant operations team consisted of Parmeshwar (Peter) Coomar, Jason Karamol, Joe Czapiewski, Cameron Albring, Terry Lunn and adjunct faculty.

Both entry-level and advanced-level certification courses for the Fall 2013 Semester are under way, but are not grant-funded. For more information on the 10-week accelerated welder training, please contact the Applied Science and Engineering Technology Division at (734) 384-4112.

The final Department of Labor grant-funded welding class finished during the Winter Semester.

MIDWEST RENEWABLE ENERGY ASSOCIATION SOLAR TRAINING NETWORK

In February, former MCCC President Dr. David Nixon and Parmeshwar (Peter) Coomar, dean of the Applied Sciences Division, signed an agreement to become a partner in the Midwest Renewable Energy Association Solar Training Network. The agreement provides Applied Science and Engineering Division faculty members Alex Babycz and Tom Harrill with professional development opportunities and curriculum sharing with other renewable energy and solar programs.

Reaume Joins ASET Division

Mike Reaume joined the Applied Science and Engineering Technology Division at Monroe County Community College as a Perkins CAD and lab tech specialist.

Reaume is a graduate of the automotive engineering technology program at MCCC. While working on his degree, he earned his Certified SolidWorks Associate certification and was employed by La-Z-Boy as a SolidWorks technician. During his spare time, he plays guitar in an instrumental post-rock band that he also manages. He enjoys riding and restoring his vintage motorcycle.

Dubois Shares Best Practices in Nuclear Education at RCNET Annual Meeting

Martin Dubois, assistant professor of mechanical engineering technology, attended the Regional Center for Nuclear Education and Training annual meeting in Ft. Pierce, Fla. and shared best practices in nuclear training with professionals from around the country. The meeting focused on four key topics: standardizing curriculum, attracting a diverse college pipeline, exposing technicians to nuclear culture and leadership behaviors during their college experience, and opening career and academic pathways to nuclear technician graduates to ensure future leaders.

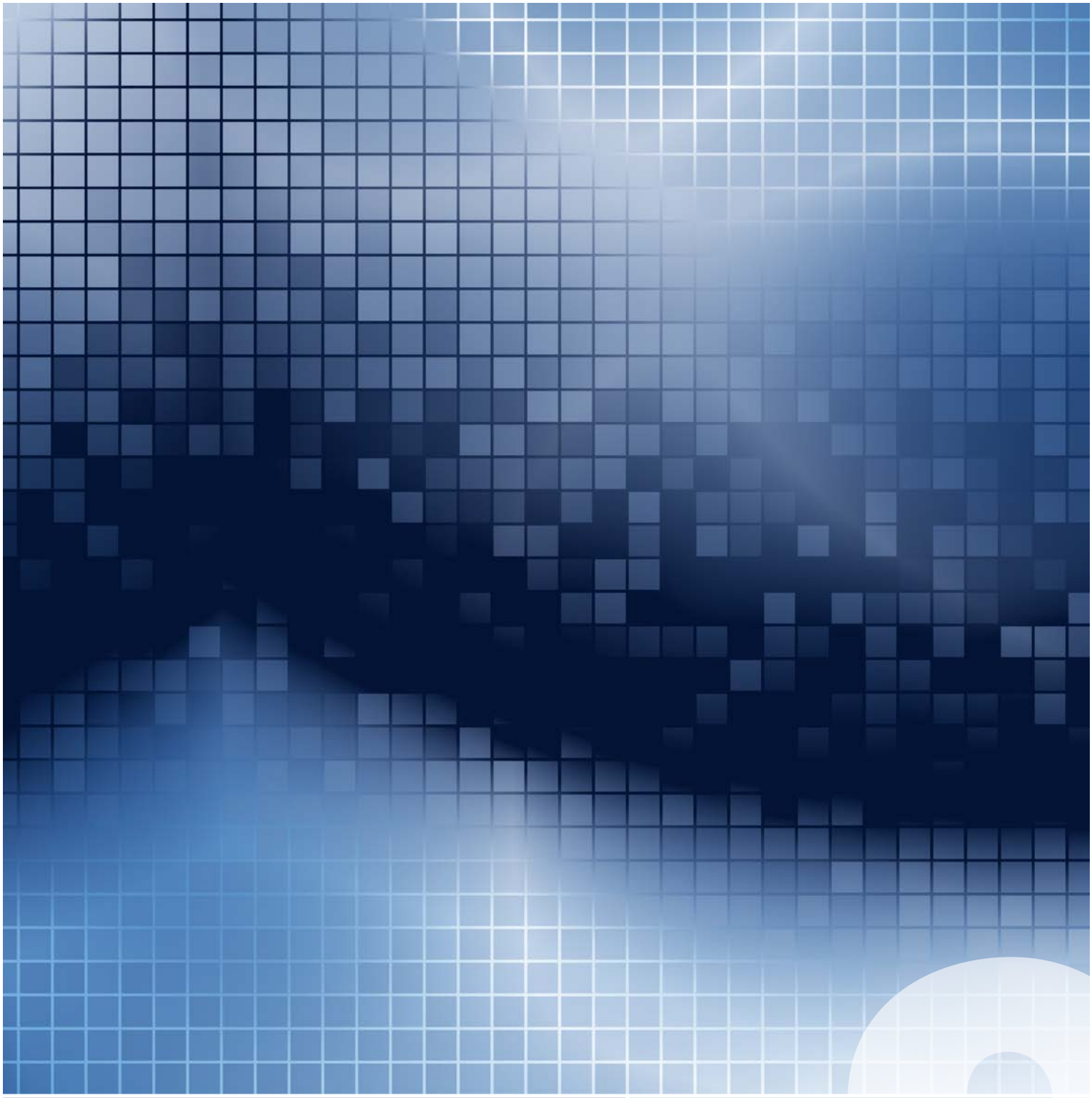
Due to growth, an aging workforce, international competition and natural attrition, the nuclear industry in the U.S. is experiencing unprecedented workforce demands. Over the next two decades, nuclear workforce demand will exceed the current supply of trained personnel. In August of 2011, the National Science Foundation established the RCNET program to meet these workforce demands in a standardized and systematic way.

RCNET's primary focus is on two-year college training. Its membership includes 46 colleges and universities, 35 industry partners, and multiple agency and other partners. Funding for travel to this event was covered by the NSF via a grant to RCNET.

THE SOCIETY of Manufacturing Engineers student club, which is advised by Assistant Professor of Product and Process Technology Bob Leonard, finished in silver place at the Sumo Heavyweight Robotics Competition in Marion, Ohio in April. The trip to the contest was made possible by a Foundation at MCCC Enhancement Grant. From left are MCCC team members Josh Roach, Dylan Boudrie, Zach Szabo and Danny Bowles III.

LEADERSHIP MONROE CLASS TOURS THE CAREER TECHNOLOGY CENTER

More than 15 business and industry professionals enrolled in the 2013 Leadership Monroe class toured the Career Technology Center in March as part of their experiential learning experience.



MONROE COUNTY COMMUNITY COLLEGE

enriching lives

QUESTIONS ABOUT THIS PUBLICATION

CONTACT:

Cameron Albring, Applied Science and Engineering Technology Division
calbring@monroeccc.edu
734-384-4112
or
Joe Verkennes
Editor/Director of Marketing
Monroe County Community College
jverkennes@monroeccc.edu
734-384-4201