MONROE COUNTY COMMUNITY COLLEGE

TECH UPDATE

NEWS FROM THE INDUSTRIAL TECHNOLOGY DIVISION

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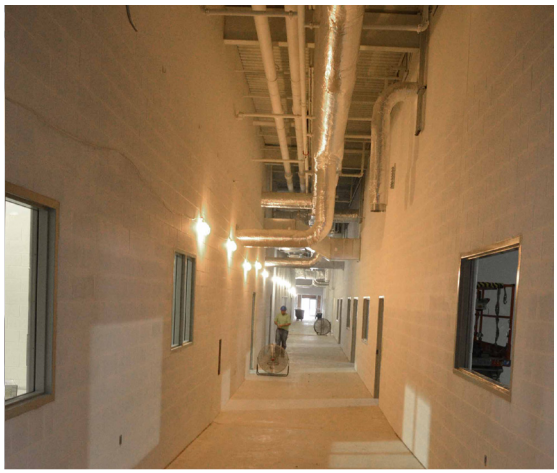


Clockwise from left: the main entrance to the Career Technology Center; the interior controls for the geothermal heating and cooling system; the main hallway between the large bay classrooms and labs; pipes exchanging water between the facility and the geothermal field, which has 60 wells that are each 400 feet deep.

CAREER TECHNOLOGY CENTER CONSTRUCTION ON SCHEDULE FOR AUGUST OPENING

Designed to Support Delivery of Instruction to Prepare Students for High-demand, High-skill Jobs

Construction on the new, $17-million Career Technology Center at Monroe County Community College is on schedule for an August 2013 opening.

The 60,000-square foot Career Technology Center will provide 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.

It will allow for the updating and expansion of existing programs now housed in the East and West Technology buildings, which are 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 will provide 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.

A combination of sustainable systems has been integrated into the design of the facility that will be incorporated into the curriculum. The building will serve as a learning laboratory for students in industrial technology fields. The Career Technology Center will be built to Leadership in Energy and Environmental Design (LEED) Silver Standards and feature state-of-the-art lab space, a geothermal system, green roof, Industrial Technology Division and faculty offices, a computer classroom and labs for all of the following areas: automation, automotive, construction, electronics, manufacturing, materials, mechanical design, metrology, renewable energy, nuclear energy and welding.

The state of Michigan is financing half the cost of construction. The college has committed to fund the other half through existing funds and a capital campaign in support of the facility.

REALIZING THE VISION
POWERING THE WORKFORCE OF TOMORROW

For more information on the Career Technology Center at Monroe County Community College, including ways to support the new facility, visit www.monroeccc.edu/ctc.

NEARLY 100 STUDENTS PARTICIPATE IN INDUSTRIAL TECHNOLOGY CAMPS

The Industrial Technology Division held eight technology camps for a total of 97 grade school and high school campers through the Office of Lifelong Learning's FUNdamentals Summer Camps program. Nearly 60 of those students were welding campers. All campers gained hands-on experience while exploring high-tech equipment and software related to industrial technology fields. In addition, each camper received a free camp T-shirt.

Tom Harrill, assistant professor of electronics and computer technology (far left) and Marty Dubois, assistant professor of mechanical engineering technology (far right), pose with the students in their Electronics and Robotics Camp.

Welding Assistant Professor Taught at MCCC for 28 Years

Assistant Professor Emeritus of Welding Technology Mr. Andrew (Andy) Burke died suddenly on August 12 in Port Orange, Fla.; he was 65 years old. Mr. Burke was formerly from Monroe, Michigan.

He taught at Hamtramck High School in Hamtramck and Fordson High School in Dearborn before starting as a faculty member at Monroe County Community College, where he spent 28 years. His career at MCCC was marked by a love for teaching and dedication to his students.

He is survived by his wife, Valentina (Tina).

Mr. Andrew Burke

NEW CERTIFICATE AVAILABLE IN NON-DESTRUCTIVE TESTING

A new certificate program in non-destructive testing became available this fall.

It is designed to apply the concepts of inspection, testing or evaluation of materials, components and assemblies for materials' discontinuities, properties and machine problems without further impairing or destroying the parts serviceability.

The courses for the program include: Introduction to Nondestructive Testing, Liquid Penetrant and Magnetic Particles, Visual Testing, Radiography Level 1, Radiography Level II, Ultrasonic Testing Level I, Ultrasonic Testing Level II, Introduction to Materials, Fundamentals of Electricity and Instrumentation.

Curriculum development was led by Dean of the Industrial Technology Division Parmeshwar (Peter) Coomar, Professor of Materials Roop Chandel and Assistant Professor of Mechanical Engineering Marty Dubois. Subject matter experts for course development were Industrial Technology Division adjunct instructors Mike Taylor and Ed Schultz.

AWS President Visits MCCC

American Welding Society President William Rice visited with Monroe County Community College welding faculty, staff and students on September 19 and discussed AWS's continued commitment to welding education.

From left, MCCC President Dr. David Nixon, Don DeCorte of Roma Manufacturing, Rice and Industrial Technology Division Dean Parmeshwar (Peter) Coomar.

Chandel Attends Nondestructive Testing Conference

Dr. Roop Chandel attended the American Society for Nondestructive Testing Fall Conference and Show in Orlando, Fla., which ran from Oct. 31-Nov.1. This annual event provides an opportunity for faculty members to become familiar with the latest tools and technology in NDT and listen to experts on various topics. Chandel also attended a short course on ultrasonic weld inspection. The attendance at this conference enabled networking with NDT personnel from industry and academia, which will help in furthering our newly introduced certificate program in NDT.

WELDING GRANT UPDATE

In 2009, Monroe County Community College received a $1.7 million U.S. Department of Labor Community-Based Job Training Grant to offer accelerated 10-week courses to prepare students for the American Welding Society's QC10 and QC11 certifications.

A Welding Grant Best Practices Workshop was held in August in the La-Z-Boy Center at MCCC, and included industry partners, high school teachers and community college instructors. The workshop was part of the welding grant's "Product and Information Package" that will be submitted to the DOL office prior to the grant's end date of January 31, 2013.

To date, more than 60 percent of students have been employed after receiving the entry-level and advanced-level welder training offered through the grant program.

The last three welding grant-funded courses were offered for Fall Semester. Because of the popularity of the courses and employer demand, the college will resume the courses as regular college classes for the Winter Semester.

Participants in the Welding Grant Best Practices Workshop.

Faculty Members Present Electric Car Instruction Methods at Conference

Industrial Technology Division faculty members Tom Harrill and Don Kehrer presented their methods of instruction on how to build electric cars to a standing-room-only crowd at the Trends in Occupational Studies Conference in October.

The electric car was transported from the college to Traverse City for the presentation, as well as for display as part of the exhibits. The conference was attended by 20 MCCC faculty members and administrators, whose participation was funded by federal Perkins grant funds.

Industrial Technology faculty Members Don Kehrer (left) and Tom Harrill (right) answer questions about the MCCC electric car at the Trends in Occupational Studies Conference.

Coomar, Dubois Attend Nuclear Curriculum Summit

Parmeshwar (Peter) Coomar, Dean of the Industrial Technology Division, and Marty Dubois, assistant professor of mechanical engineering technology, recently attended the Nuclear Curriculum Summit hosted by the Regional Center for Nuclear Education and Training. The summit was held at the Corporate Headquarters of the Institute for Nuclear Power Operations in Atlanta.

RCNET is a consortium of 39 colleges and universities, 24 industry partners, 13 agencies and other partners, and 28 secondary academic partners. INPO is the accrediting agency for training programs throughout the nuclear power generation industry. Monroe County Community College is a member of the RCNET consortium.

RCNET's mission is to make sure the demand for skilled nuclear technicians is met in a standardized and systematic way. Its goal is to provide standardized nuclear curriculum packages, maintain a learning repository for nuclear curriculum, provide professional development for educators, provide career assistance and promote nuclear energy and nuclear careers.

The Nuclear Curriculum Summit focused on developing a repository of curriculum material to support Nuclear Engineering Technology courses at the member institutions.

Dubois attended a follow-up training in November to utilize material from global performance improvement company GP Strategies that is used extensively throughout the nuclear industry. Through RCNET and a grant from the National Science Foundation, this material will now be available to RCNET members, including MCCC.

Involvement with RCNET and INPO enhances the opportunity of MCCC nuclear engineering technology graduates to earn the Nuclear Uniform Curriculum Program Certificate. This certificate is recognized nationally by the nuclear power industry.

Travel expenses to these events were covered by the NSF grant.

TOURING GEMA Assistant Professor of Product and Process Technology Bob Leonard (third from left) and his students recently toured the Global Engine Manufacturing Alliance LLC. GEMA is a manufacturing arm of Global Engine Alliance LLC, which was a joint venture of Chrysler, Mitsubishi Motors, and Hyundai Motor Company for developing a line of shared engines . In September 2009, Chrysler bought out the shares of Mitsubishi and Hyundai after a 5-year run of allied research and development.

Babycz Presents on Environmental Issues, Green Building

Assistant Professor of Construction Management Technology Alex Babycz presented in the spring on environmental issues at the Environmental Career Day of the Monroe County Intermediate School District. This was a pilot program co-sponsored by the ISD, the Math and Science Center of Monroe Public Schools, the River Raisin Institute and the Monroe Boat Club.

In October, Babycz exhibited at the Washtenaw Contractors Association's "JUST BUILD IT" Construction Career Expo at Eastern Michigan University. MCCC's Industrial Technology Division developed a green construction exhibit for the expo. More than 1,300 middle and high school students were in attendance.

Assistant Professor of Construction Management Technology Alex Babycz exhibits at the "JUST BUILD IT" Construction Career Expo.

NEW WINTER SEMESTER COURSE OFFERINGS:

- **Introduction to Renewable Energy Systems** (ELEC-156) / 3 credits / Mondays / 5-8:55 p.m. (Jan. 14-April 29)
- **Introduction to Wind Energy** (ELEC-158) / 3 credits / Tuesdays / 6-9:55 p.m. (Jan. 15-May 4)
- **Green Build and Rating System** (CONM-160) / 3 credits / Thursdays / 6-9 p.m. (Jan. 17-May 2)
- **Visual Testing** (NUET-104) / 2 credits / Tuesdays / 7-8:55 p.m. (Jan. 15-April 30)

INDUSTRIAL TECHNOLOGY DIVISION HOSTS X-TECH

On October 25, more than 150 middle and high school students, educators, parents, and career-changing adults were able to get a hands-on sampling of what it's really like to study and work in various industrial technology fields. They had the chance to weld various metals, run state-of-the-art machine tools, control robots, draw with CAD equipment, test the strength of steel, inspect metals, view solar and wind energy in action, read construction blueprints, program electronic equipment and more.

Articulation Agreement Signed with MTU

The mechanical engineering technology program at Monroe County Community College has entered into a 2+2 articulation agreement with Michigan Technological University in Houghton. This agreement opens up additional opportunities for graduates of MCCC's program to complete a four-year degree in mechanical engineering technology.

NUCLEAR ENGINEERING TECH STUDENTS TOUR FERMI 2

MCCC nuclear engineering technology students recently toured Detroit Edison's Fermi 2 nuclear power plant.

Garrett Keel, a student on the tour, said his time at Fermi 2 allowed him to learn about nuclear power in the best way possible: through hands-on experience.

"I've been able to go all over the plant," said Keel, 21. "I've been able to put my hands on equipment, see how things work and learn from industry veterans."

Ed Lefere, right, a master electrician with maintenance at Detroit Edison's Fermi 2 Nuclear Power Plant, leads a tour for the college of the Detroit Edison Fermi 2 Nuclear Power Plant.

STUDENT VOLUNTEERS CONSTRUCT BARRIER-FREE ACCESS RAMP

In October, faculty and students from the Industrial Technology Division's mechanical design technology and construction management technology programs volunteered to construct a barrier-free access ramp for a Bedford resident suffering from multiple sclerosis. This is the fourth ramp that MCCC students and faculty have worked on in the community. This project is supported each year by organized labor's Community Services/Community Action Liaison Program in partnership with United Way of Monroe County, the Department of Human Services and many businesses and service providers.

Dean Kerste, professor of mechanical design technology, and a student construct a barrier-free access ramp for a local resident who has multiple sclerosis.

ITD Visits International Manufacturing and Technology Show

In September, the Industrial Technology Division sponsored a day trip to the International Manufacturing and Technology Show in Chicago with funding from The Foundation at MCCC's Enhancement Grant Program. Students had the opportunity to attend a world-class event featuring machine tool, welding, robotic, automation, and instrumentation suppliers from around the world.

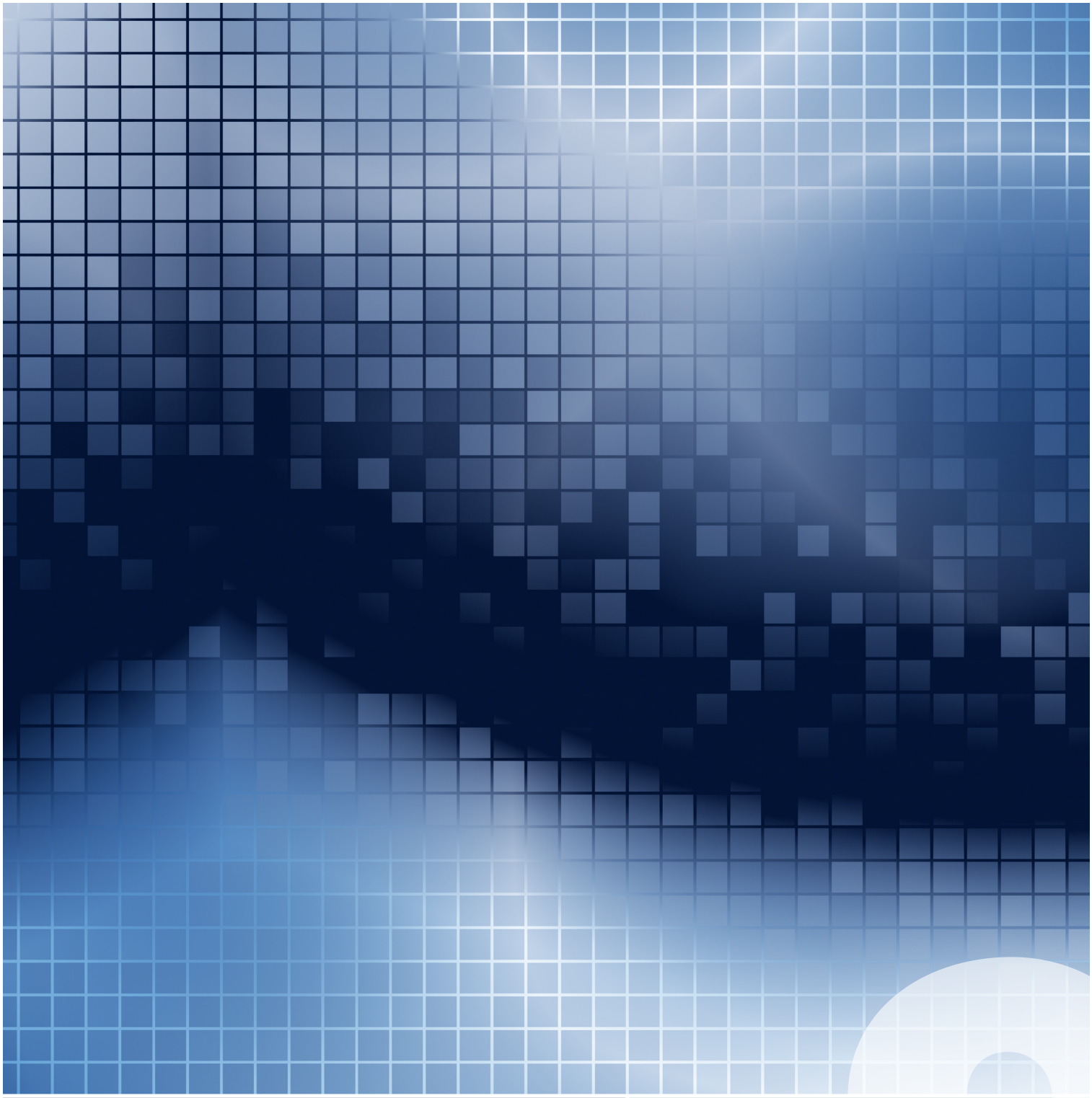
The MCCC contingent at the International Manufacturing and Technology Show in Chicago.

ITD Student Roach Receives Board of Trustees Scholarship

Monroe County Community College has awarded Board of Trustees Scholarships to outstanding students who graduated from area high schools in 2012. Joshua Roach, a graduate of Summerfield High School who earned the scholarship, plans to graduate with a two-year degree in welding technology. The scholarship provides full tuition and laboratory and service fees for each recipient for one academic year and is renewable for a second year if the recipient maintains a high standard of conduct and work.

Kerste to Present at SolidWorks World 2013 Conference

Dr. Dean Kerste, professor of mechanical design technology, will present at the SolidWorks World 2013 Conference to be held January 20-23, 2013 in Orlando, Fla. He will give a case study on how Monroe County Community College addressed the needs of its area employers by developing classes that prepare students for the CSWA and CSWP certifications. In addition, he will present how the certifications meet the Carl D. Perkins Core Indicators of Performance.



MONROE COUNTY COMMUNITY COLLEGE

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QUESTIONS ABOUT THIS PUBLICATION

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