MCCC INTRODUCES NEW PRODUCT AND PROCESS TECHNOLOGY PROGRAM

Bob Leonard, instructor for the program with two newly acquired CNC machine tools

The former manufacturing technology program at Monroe County Community College has been transformed into a brand new one under the name of product and process technology.

The program’s name transmits its broad versatility, said the lead instructor, Bob Leonard. It is designed to prepare students for careers in the high-performance manufacturing of consumer goods.

And although the word “manufacturing” might carry a negative connotation after the recent downsizing of the automobile industry, Leonard says that the industry is again on the rise in Michigan and across the country.

“Everything that you can think of has to be manufactured,” he said. “People don’t realize we’re not just making cars and stamping out dies. This program is about the process and about the product.”

“I’m getting calls now for CNC (computer numerical control) technicians. They need people that know the machines and the codes, and can actually program the ‘X, Y, and Z.’”

The new product and process technology program is the result of numerous major changes to the former program – things Leonard, whose official title is assistant professor of product and process technology, said were necessary for student success in the new era of manufacturing. Funding for new equipment valued at $61,000 was provided by Perkins grant dollars and institutional funding.

CONGRATULATIONS TO ALEX BABY CZ!

Alex Babycz was appointed for a 3-year term as an RRI Board Member of The River Raisin Institute. The River Raisin Institute was founded in October 2003 by the Sisters, Servants of the Immaculate Heart of Mary (IHM). The institute is a nonprofit organization that grew out of the sisters’ commitment to sustainability. Alex has LEED AP, LEED AP BD+C credentials and has also participated in training and testing by the United States Green Building Council that qualifies him to conduct home inspections and develop the documentation required for certification in the LEED for Homes program. Alex is looking forward to sharing his expertise in sustainability and green building with the community through the RRI.
IMTS CHICAGO TRIP

A group of faculty and students from MCCC attended the 2010 International Manufacturing Technology Show (IMTS) in Chicago, Illinois, on September 16 and 17.

IMTS is the premier manufacturing and technology show in North America. A total of 1,728 companies from 30 counties filled 1,180 booths with 1,137,375 sq. ft. of the latest advances in manufacturing technology. Over 82,411 people from more than 100 countries came to see and buy the equipment, tooling, and services. IMTS is held every even-numbered year in Chicago’s McCormick Convention center. For comparison, the show occupied space equivalent to four times the size of Detroit’s Cobo Center.

MCCC Industrial Technology division dean Peter Coomar, with faculty Roop Chandel (Welding and Material Sciences) and Martin Dubois (Mechanical Engineering Technology) accompanied 18 students from the Welding, Manufacturing, Mechanical Engineering, Electronics and Mechanical Design programs to the show. Transportation and lodging for the students was provided by a grant from the MCCC Foundation.

MCCC students had the opportunity to network with industry representatives and learn about the latest in technology in the areas of machining, welding, measurement and automation. The show features numerous displays of full size, working equipment. This gives students the chance to see firsthand technology that is too large or expensive for the classroom. The trip also included a visit to Chicago’s Navy Pier with students for dinner the night before attending the show.

Overall, the students and faculty were impressed by the show and enjoyed the Chicago experience. The Industrial Technology division plans on returning to Chicago for the 2012 IMTS show pending approval of future funding. The funding for this trip was provided for by a MCCC foundation grant.

FERMI 2 TRAINING

During the second week of August, Faculty from the Industrial Technology Division, Martin Dubois, (Mechanical Engineering Technology) and Thomas Harrill (Electronics) visited Fermi II Nuclear Power Plant to obtain insights on how to best train their students to work at a nuclear facility. Fermi’s primary liaison was Joe Fenner, a Supervisor in the Instrumentation and Control department at Fermi. Mr. Fenner presented opportunities to observe repair and maintenance procedures at various locations in the plant.

Everyone spoke at length about the needs that DTE has in regards to the nuclear industry and how Monroe County Community College could fill those needs. During the tour at Fermi, many of MCCC’s former students were working at various positions at the plant which was a very rewarding experience to see. Faculty Dubois and Harrill were very excited to observe a nuclear plant in operation and much was learned during the training sessions. It is Marty and Tom’s goal, at MCCC, to provide the best possible prospective employees to the nuclear industry through our Nuclear Engineering Technology (NUET) Program.

ELECTRIC CAR PROJECT

Begun in the Fall 2010 Semester, students from the Automotive Engineering Technology and Electronics Technology areas combined efforts to design and build an Electric Vehicle. It will be based on the “Formula SAE” size/style car of past years. This car will be purely electric, at first, with possible conversion to hybrid in the future. The hopes of this group are to eventually compete at the SAE Formula Hybrid Competition at Dartmouth University in New Hampshire. The vehicle sports a 13 H.P. peak electric drive motor and 20 Lithium Iron Phosphate (LiFePo) Batteries for a combined voltage of 72V. This combination should make the car perform very well and should be fun to drive. Don Kehrer – Automotive Engineering Technology Instructor and Thomas Harrill – Electronics Technology Instructor are advisors for the project.
MECHANICAL ENGINEERING TECHNOLOGY PROGRAM IS NOW STATE APPROVED

The Mechanical Engineering Technology Program at Monroe County Community is now state approved to receive funding under Carl Perkins grant for program support. The funding to develop a ‘program of study’ for the Mechanical Engineering Technology program was provided by the Carl Perkins grant to the amount of $7500. The lead faculty on this project was ITD faculty Martin Dubois assisted by ITD faculty Tom Harrill, Math/Science faculty Jim Vallade and Counseling faculty Jill Denko.

CAPACITY BUILDING, WELDING

The Grant staff submitted a budget modification request to the US Department of Labor to renovate part of a donated building facility by the former owners pump engineering in town, into a welding lab to accommodate additional demand for trained and certified welders. The modification would increase the total welding stations to 45 that would include the 20 plus capacity on the Monroe campus and 25 at the Hurd Road facility. Additional opportunities provided to the students would include training on sub arc equipment as demanded by local employers such as Venn Tower, virtual weld station and robotic welding. Upon completion of the grant this facility would remain with the college and provide additional capacity to train both entry level and incumbent welders. The grant would pay for purchase of additional equipment and faculty time to train welders. We expect the demand for welders to remain robust beyond the life of the grant and the need for qualified welders increasing over time.

PERKINS UPDATE

Perkins allocation for the college this year (2010-11) was $186,000. Additional funding is expected in the form of allocation for program development and improvement in this fiscal year. Perkins funds have been traditionally used by the college to support occupational program related training that included equipment purchase, special populations related data collection and support, student services activities, assessment and professional development activities. Faculty from the Technology division, Business division and Health divisions of the college were supported with Perkins funds for completing professional development activities in the 2009-10 school year and is expected to continue in the current year. Occupational program promotion, subsidizing summer camp activities, student placement survey data collection are some of the new initiative that the grant funds are expected to support in the future.

TRENDS PRESENTATION AND PROGRAM OF STUDY GRANT COMPLETION

Faculty from the Industrial Technology along with faculty from other occupational areas within the college attended the annual TRENDS in Occupational Studies conference in Grand Rapids, Michigan. Faculty Martin Dubois form MCCC and Laurie Washington from DTE Human Resources presented at the conference on future personnel need for the Nuclear Power Industry in south east Michigan and within the US. Mr. Dubois also presented on completion of a grant funded project for the Mechanical Engineering Technology program at the conference. Other presenters included Faculty Tom Harrill who jointly hosted a Electronics roundtable with another faculty from another Community college within the state. Faculty Roop Chandel and Grant Coordinator Joe Czapiewski also presented at the Conference on the DOL funded Welding grant program.

DOL CBJTG WELDING GRANT UPDATE

The MCCC, Department of Labor welding grant funded program has awarded 82 (American Welding Society) AWS certification to date, to unemployed, underemployed and dislocated male and female workers who have successfully completed the 10 week welding training program, both at the basic and advanced levels. The grant team is recruiting from prospective trainees in Monroe County, the surrounding areas of south east Michigan, and Northwest Ohio to become certified welders. The next 10 week welding class starts February 14, 2011. For more information, please visit www.mcccweldccoe.org or contact Joe Czapiewski, Welding Grant Coordinator at 734-384-4145; or jczapiewski@monroeccc.edu.
CONSTRUCTION MANAGEMENT STUDENTS EARN GREEN ADVANTAGE CERTIFICATE

Construction Management students Constance Huff and Shawn Davis received scholarships through grant funds from Monroe Environmental. Both, Constance and Shaun also successfully completed the Green Advantage Certification which was made possible by RRI who hosted the Green Building Commercial Training program at IHM Motherhouse in Monroe, MI on October 5, 2010.

A limited number of scholarships were granted by the Monroe County Environmental Fund for Monroe County residents or people working in Monroe County. Mauser Harmony with Nature Foundation also provided scholarship funds. Connie and Shawn were grateful for this opportunity!

THANK YOU!

Thank you to Champion Spark Plug in Toledo, OH for donating four eddy current (EC) dynamometers to the Automotive Department at MCCC. ITD Faculty, Don Kehrer and MCCC student assistants, Andy Dreier and Stephen Kodysh were able to pick up the almost brand new equipment at Champion Spark Plug, which will now reside in Plymouth, MI. EC dynamometers are currently the most common absorbers used in modern chassis dynos. One dyno in particular is equipped with high speed low inertia, all which will be used for engine testing in the classroom.

ITD COURSES TO BE OFFERED WINTER 2011
Classes begin January 7th, 2011. Enroll Today!

CATIA V5.0, METC-170-01 (3 credits)
Blended Course, Monday 5:00PM - 9:55PM
West Technology (Bldg W), Room 157B

Construction Estimating, CONN-244-01 (3 credits)
Lecture Thursday 6:00PM - 8:55PM
East Technology (Bldg E), Room 127

AC Motors and Controls, ELEC-128-01 (3 credits)
Lecture/Lab, Tuesday, Thursday 6:00PM - 7:55PM
East Technology (Bldg E), Room 103

Computer Applications in Machine Design, METC-210-01 (4 credits)
Tuesday, Thursday 4:00PM - 6:55PM
West Technology (Bldg W), Room 157B

Advanced AC and Refrigeration and Refrigeration Certification, MECH 127-01 (3 credits)
Thursday 6:00PM - 9:55PM
West Technology (Bldg W), Room 164

Introduction to Metrology, QSTC-150-01 (3 credits)
Tuesday, Thursday 7:00PM - 8:55PM
East Technology (Bldg E), Room 125

Constance Huff, Faculty, Alex Babycz and Shaun White. Students proudly display their well-deserved Green Advantage certificates.

One of the many dynamometer’s donated from Champion Spark Plug.
NEW ITD ADMINISTRATIVE ASSISTANT

Cameron Albring was hired as the new Administrative Assistant to the Dean of Industrial Technology Division effective August 9, 2010. Cameron has a Bachelors and Masters degree in Education from Bowling Green University and University of Toledo, respectively. She previously served as the grant assistant for the DOL funded Welding Grant. Cameron can be reached at 734-384-4112; or calbring@monroeccc.edu should you have any questions for the Industrial Technology Division.

NUCLEAR SUPPLIER GROUP CONFERENCE

Monroe County Community College, Industrial Technology division staff and faculty from the Nuclear Engineering Technology program were invited to participate in the Nuclear Supplier Group Conference in Dearborn, Michigan in September of 2010. The supplier group conference was sponsored by the Nuclear Supplier group led by GE-Hitachi, the prime contractors for building the future Fermi 3 Nuclear Power plant in Monroe, Michigan if the project were to receive a final go ahead from DTE Energy and the Government. Dr. David Nixon, President of Monroe County Community College was invited to speak at the conference. Other participants from the college included, Faculty Martin Dubois, Dean Peter Coomar and Director of Admissions Mark Hall.

QUESTIONS ABOUT THIS PUBLICATION?
Contact Cameron Albring,
Industrial Technology Division
calbring@monroeccc.edu
734-384-4112

CUSTER BENCH FOR MONROE, MI

Jeffrey Green, AICP Interim Director / City Planner / Historic Preservation Officer for the Department of Planning & Recreation contacted, ITD Faculty, Alex Babycz to see if his MCCC students could cast the bench. Alex looked to his colleague, Faculty, Dean Kerste to design the structure. The CAD drawing designed by Dean is show below. Students at MCCC in Alex’s construction course will be receiving firsthand experience on how to build the form work and will then cast the concrete. The concrete mixture for this project was formulated by Kuhlman Concrete, Inc. in Toledo, Ohio. Students from Alex’s classroom also visited Kuhlman in Toledo and spoke to Stan Radabaugh, Kuhlman’s Quality Control Director who designed the concrete for the bench.

THE CUSTER EQUESTRIAN MONUMENT CENTENNIAL - JUNE 4, 2010

ITD FACULTY VISITS CLYDE UNION PUMPS

On October 29 2010, ITD Faculty Roop Chandel and Martin Dubois visited Clyde Union Pumps in Battle Creek, MI. At the plant they were met by Mark Vogel and Jeffery Stull. Clyde Union designs, manufactures and services pumps for every industry- from oil refineries to nuclear power generation. They have seven plants worldwide and many regional offices. At their Battle Creek plant, they carry out state-of-the-art machining, balancing, repairing, and servicing. One remarkable feature of this plant is the Pump Academy that offers a 4 day course on all aspects of inspection, testing and servicing of pumps.

Clyde Union Pumps is an ideal place for employment of our graduates in machining, welding (GTAW welding in particular) and mechanical engineering. One area where they are short of applicants is the nondestructive testing; particularly liquid penetrate and magnetic particle inspection at ASNT Level II. We were encouraged to offer such skills. They also offered collaboration with us on joint funding for such trainings. Clyde Union is also willing to donate some pumps to us for our classroom demo.