

MONROE COUNTY COMMUNITY COLLEGE

# TECH UPDATE

NEWS FROM THE APPLIED SCIENCE AND  
ENGINEERING TECHNOLOGY DIVISION

[www.monroecc.edu](http://www.monroecc.edu)

VOLUME 12 | ISSUE 2

SUMMER 2016



**MCCC begins offering UAW-Ford  
Joint Apprentice Program, three courses designed  
for employees to attain higher goals.**

INSIDE

# MCCC OFFERS COURSEWORK TO FORD APPRENTICES

In the spring, MCCC was notified that the National Joint Apprenticeship Committee had approved it as an Industrial Readiness Certificate Program provider in Michigan, and the college's Applied Science and Engineering Technology welcomed Ford apprentices to campus.

The UAW-Ford Joint Apprentice Program is designed for employees with the desire and ambition to attain higher goals. It prepares individuals to become certified, skilled tradespersons. It pays employees while they learn and, upon completion, provides a way for newly-graduated journeymen to achieve higher pay, greater job satisfaction and can even point the way to additional career opportunities.

All full-time seniority Ford Motor



Company employees interested in earning a position on the facility's Apprentice Eligibility List must successfully complete the Industrial Readiness Certificate Program (IRCP). The program consists of three standardized, non-accredited courses: IRCP-1, Shop Math, IRCP-2 Machine Tool and Blueprint Reading and IRCP-3, Trade Related Preparation.

MCCC began offering all three non-

credit courses in May to 150 Ford employees. Classes are held in the college's Career Technology Center.

To register for fall 2016 IRCP classes at MCCC in the Fall Semester, employees should contact Barry Kinsey at (734) 384-4124 or Cameron Albring at (734) 384-4112.

For more information about the Industrial Readiness Certificate Program, visit <http://uawford.org/apprentice/>.



## SWAPPING PARTS, TOUTING AUTO SERVICE EDUCATION

Jack Larmor, coordinator of MCCC's new automotive service technology program that is pending HLC approval, participated in the Swap Meet and Car Show at the Monroe County Fairgrounds in April. Larmor used the opportunity to provide information on the new program and recruit students to enroll in it for Fall Semester.



# MCCC Partners with Local Organizations to Offer STEM Summer Camps

Monroe County Community College has partnered with the Monroe County Intermediate School District, Monroe County Business Development Corporation and all nine local school districts on the Monroe County Career Technology Education Committee to develop STEM (Science, technology, Engineering and Math) programs for students in grades K-12. With the help of nine local sponsors, the CTE Committee is offering a number of STEM Camps this summer at MCCC. All camps will be held in MCCC's Career Technology Center. Call (734) 384-4127 to register for any of the camps or go to <http://www.monroeccc.edu/summercamps.htm> for more info. The camps include:

- STEM Building Construction Camp.** Construction camp integrates safety instruction, building design, a hands-on project and an introduction to all aspects of the trades. For boys and girls grades 9-12. There is no charge for this camp. Two sections will be held: June 20-24 from 9 a.m.-noon and June 20-24 from 1-4 p.m.
- STEM Car Camp.** This camp will cover a range of topics including shop safety, the installation of automobile accessories such as windshield wipers, tires and rims and career opportunities in the field. For boys and girls grades 9-12. There is no charge for this camp. Two sections will be held: June 20-24 from 9:30 a.m. - noon and June 20-24 from 1-3:30 p.m.
- STEM CAD (Computer-aided Design) Camp.** This camp will give campers a look into some of the skills and tools used in the mechanical design process. For boys and girls in grades 8-12. The cost of this camp is \$24. Two sections will be offered: July 11-15 from 9:30 a.m.-noon and July 11-15 from 1-3:30 p.m.
- STEM Metrology Camp.** This measurement science camp will teach campers how to design and run measurement calibrations to determine accuracy, precision, reliability and traceability. For boys and girls grades 9-12. There is no charge for this camps. Two sections will be offered: July 11-15, 9:30 a.m.-noon and July 11-15 1-3:30 p.m.
- STEM Welding Camp.** Campers will learn the basics of welding technology with an emphasis on shielded metal arc (stick) welding and gas metal arc (MIG) wire welding on low carbon steel. For boys and girls in grades 9-12. Two sections will be offered: June 20-24, 9:30 a.m.-noon and June 20-24, 1-3:30 p.m.



## CONTACT INFORMATION

### DEAN

Parmeshwar Coomar  
[pcoomar@monroeccc.edu](mailto:pcoomar@monroeccc.edu)  
 734-384-3409

### ADMISSIONS & GUIDANCE

Mark Hall  
[mhall@monroeccc.edu](mailto:mhall@monroeccc.edu)  
 734-384-4261

### APPRENTICE PROGRAMMING/ ADMINISTRATIVE ASSISTANT

Cameron Albring  
[calbring@monroeccc.edu](mailto:calbring@monroeccc.edu)  
 734-384-4112

### AUTOMOTIVE ENGINEERING

Parmeshwar Coomar  
[pcoomar@monroeccc.edu](mailto:pcoomar@monroeccc.edu)  
 734-384-3409

### AUTOMOTIVE SERVICE

Jack Larmor  
[jlarmor@monroeccc.edu](mailto:jlarmor@monroeccc.edu)  
 734-384-4145

### CONSTRUCTION MANAGEMENT

Parmeshwar Coomar  
[pcoomar@monroeccc.edu](mailto:pcoomar@monroeccc.edu)  
 734-384-3409

### ELECTRONICS/ELECTRICITY

Tom Harrill  
[tharrill@monroeccc.edu](mailto:tharrill@monroeccc.edu)  
 734-384-4115

### MECHANICAL DESIGN

Dean Kerste  
[dkerste@monroeccc.edu](mailto:dkerste@monroeccc.edu)  
 734-384-4121

### MECHANICAL ENGINEERING

Martin Dubois  
[mdubois@monroeccc.edu](mailto:mdubois@monroeccc.edu)  
 734-384-4120

### NUCLEAR ENGINEERING TECHNOLOGY

Martin Dubois  
[mdubois@monroeccc.edu](mailto:mdubois@monroeccc.edu)  
 734-384-4120

### PRODUCT & PROCESS TECHNOLOGY

Bob Leonard  
[bleonard@monroeccc.edu](mailto:bleonard@monroeccc.edu)  
 734-384-4114

### QUALITY SYSTEMS & METROLOGY

Parmeshwar Coomar  
[pcoomar@monroeccc.edu](mailto:pcoomar@monroeccc.edu)  
 734-384-4209

### RENEWABLE ENERGY

Parmeshwar Coomar  
[pcoomar@monroeccc.edu](mailto:pcoomar@monroeccc.edu)  
 734-384-3409

### WELDING & MATERIALS TECHNOLOGY

Roop Chandel  
[rchandel@monroeccc.edu](mailto:rchandel@monroeccc.edu)  
 734-384-4165

# MCCC Adds Davis-Besse as Additional Industry Partner for Nuclear Tech Program

Monroe County Community College announced in February that FirstEnergy's Davis-Besse Nuclear Power Station – located 35 miles east of Toledo in Oak Harbor, Ohio – has officially become a new industry partner for the college's associate degree in nuclear engineering technology program.

DTE Energy, operator of the Fermi 2 Nuclear Power Plant in Newport, is the college's primary industry partner and has jointly participated with MCCC in the Nuclear Energy Institute's (NEI) Nuclear Uniform Curriculum Program, which promotes the development of future U.S. nuclear power industry employees by providing an accredited, two-year education program that meets industry-wide learning objectives.

As part of this program, MCCC and DTE Energy align the college's nuclear energy technology curriculum with the initial training programs offered by DTE Energy and accredited by the National Nuclear Accrediting Board. Through the partnership announced in February, Davis-Besse is now sharing in advising on the curriculum.

According to Parmeshwar (Peter) Coomar, dean of the Applied Science and Engineering Division at MCCC, key benefits of the new partnership with Davis-Besse include support through additional internships and job opportunities and expansion of the college's involvement in the nuclear industry.

"This partnership with Davis-Besse will mean additional employment opportunities for both our graduates and future student entrants into the program," Coomar said. "This

agreement is good for MCCC, FirstEnergy and DTE Energy, good for the nuclear industry and good for jobs."

"Over the next decade, nearly half of the nuclear industry's workforce will be eligible to retire, and training the next generation of nuclear professionals is a top priority for the industry," said Davis-Besse site vice president Brian Boles. "Monroe County Community College's nuclear engineering technology program helps students gain a quality education while also developing a good sense of their chosen profession and valuable work experience. We are honored to partner with MCCC on this important endeavor."



*Clockwise from top left: Parmeshwar (Peter) Coomar, MCCC dean of the Applied Science and Engineering, Division; Dr. Grace Yackee, MCCC vice president of instruction; Joe Verkennes, MCCC director of marketing; and Marty DuBois, associate professor of mechanical engineering technology; Brian Boles, Davis-Besse site vice president, and Dr. Kojo Quartey, MCCC president, pose for a photo after signing the agreement to add Davis-Besse as an additional partner for MCCC's nuclear technology program.*

Coomar added that MCCC's nuclear engineering technology program uses a learning approach that emphasizes both theory and hands-on skills necessary to function in the technical environment of the nuclear industry. It stresses effective oral and written communication, as well as related mathematics, science and technical skills. The program prepares students to become highly-adaptable energy technicians skilled in the generation, transmission and distribution of power and provides continuing education and training for the upgrading of worker skills and certification.

Nuclear engineering technology graduates are trained to work at any domestic nuclear power plant, and the 2014 median annual salary nationwide was

\$74,690, according to the Bureau of Labor Statistics. There are 99 operating nuclear power plants in the U.S.





# Record Number Participates in SolidWorks User Group Conference at MCCC

The Applied Science and Engineering Technology Division at Monroe County Community College hosted the 6th meeting of the Southeast Michigan and Northwest Ohio SolidWorks User Group conference in April at the Career Technology Center, and a record-breaking 131 participants attended.

SolidWorks is 3-D parametric modeling software that is widely used in mechanical design and engineering applications. Currently there are more than 30,000 educational institutions teaching SolidWorks in 80 countries. There are also greater than 260 SolidWorks user groups worldwide with 15,000 active members.

"The user group not only provides a venue for our students,

it also brings in regional employers in the design and engineering fields," said Dr. Dean Kerste, professor of mechanical design technology and SolidWorks User Group leader. "For many of these employers, this is their first exposure to MCCC and the offerings of the ASET division."

The conference is an opportunity for SolidWorks users to network with colleagues and peers to see how others are using the software in their workplace. It is free and open to students, teachers, designers, engineers, employers and anyone with an interested in SolidWorks and the mechanical design industry. For more information regarding future meetings, please contact Dr. Dean Kerste at [dkerste@monroeccc.edu](mailto:dkerste@monroeccc.edu)

## Hoppert Named 2016 Outstanding Certified Welder

Todd C. Hoppert was named 2016 Outstanding Certified Welder during Monroe County Community College Honor's Reception in April. Hoppert, a native of Monroe, served in the U.S. Marine Corps and did one tour of duty in Afghanistan where he was wounded and partially disabled. He

holds both an air frame mechanics license and an avionics certification. He also holds the 2G, 3G and highly-sought 6G pipe welding certification. He has just completed the application process to become a pipefitter/welder apprentice.

*Ed Baltrip and Todd C. Hoppert*



# Alex Babycz Retires after 28 years

Alex Babycz, assistant professor of construction management technology, retired after 28 years of teaching construction management technology, renewable energy and automotive service technology courses.

Babycz was considered an outstanding and caring professor who helped thousands of students earn a livelihood in skilled trades. He demonstrated a high level of professional competence, involvement, and dedication through memberships in professional societies, community involvement, and as a LEED Certified Examiner of Green Buildings. Babycz was instrumental in developing and maintaining one of MCCC's initial 3+1 transfer articulation agreements a four-year institution. This agreement allows graduates of the construction management program at MCCC to transfer up to three years of credit toward a bachelor's degree in construction management at Eastern Michigan University.

He worked tirelessly to secure the resources necessary to effectively operate the MCCC automotive service technology, construction management technology and renewable energy certificate programs by promoting the programs, securing grants and scholarships, garnering business and industry support, and working to secure employment opportunities for students.



Alex Babycz, assistant professor of construction management technology (right), and associate professor of art Gary Wilson were honored in May at a retirement reception held in the college's La-Z-Boy Center.

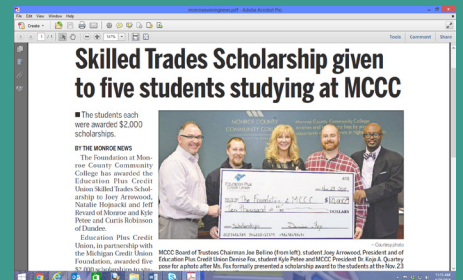


## LEONARD TRAINS ON LATEST FANUC CNC SYSTEM MODEL

Bob Leonard, assistant professor of product and process technology, participated in Fanuc Technical Training in Chicago in late winter. Leonard is now fully trained in the operation of latest Fanuc CNC Series 30i/OiD model for simulation. This particular CNC model is part of a series that is designed for today's most complex, high-performance machines with a large number of axes, multiple part program paths and high-speed auxiliary machine functions. Leonard will be incorporating content from his Fanuc technical training into MCCC's machining and CNC courses.

## Arrowood and Pete receive Skilled Trades Scholarship

Nuclear engineering technology student Joey Arrowood and automotive engineering technology student Kyle Pete were each presented a \$2,000 Skilled Trades Scholarship at meeting of the Monroe County Community College Board of Trustees in the fall.



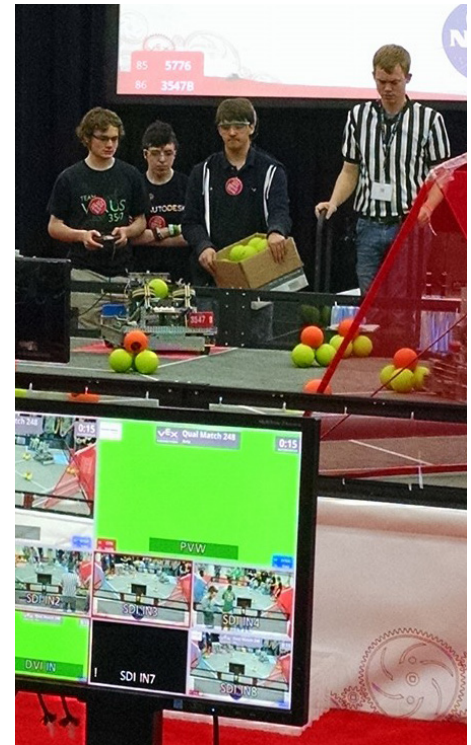


# UPDATE FROM MIKE MOHN, COORDINATOR OF MCCC'S VEX ROBOTICS TEAM 3547: VIRUS

It has been a busy year for MCCC's VEX Robotics team, from hosting the first official competition in Michigan at the Monroe County Fair, hosting two competitions at MCCC in the fall and winter, and then to the State Championship in Lansing and the World Championship in Louisville, Ken., we have seen both substantial growth and significant reorganization.

For the 2015-16 season, after separating last fall from the high-school FIRST robotics team (which is now run by the Monroe County Intermediate School District), we had two VEX high-school teams, three VEX middle-school teams, and, with funding from The Foundation at MCCC, we started a new VEX IQ elementary school team.

Coached by members of the high-school teams, the rookie elementary VEX IQ team did very well for its first year, making it all the way to the Michigan State VEX IQ competition. Our high school and middle school teams also had a great year, with all five teams going to the Michigan State Championship hosted by Michigan State University. Two of our middle-school teams, partnered with a team from Grand Blanc, made it all the way to the Michigan State Finals, missing out on a bid to the World Competition by only 12 points. Four of our teams, with parents and mentor/coaches, traveled to the World Competition in Louisville to volunteer as judges, inspectors, game officials and field support staff. While we were there, one of our high-school



teams was called up to fill in for a team that was disqualified, giving the students the awesome experience of competing at the world competition.

The VEX Robotics Team operates as a non-credit class through MCCC's Lifelong Learning Office. As part of MCCC, our VEX Robotics students (grades 3-12) have an MCCC student ID and email and receive continuing education units each semester on their college transcripts. More than half of our robotics team alumni have continued their studies at MCCC, with several dual enrolling while still in high school. To keep up with the team's activities, please look for us on Facebook at VEX Team Virus, visit us at our booth at the Monroe County Fair, or come to the MCCC/MCF VEX Qualifier on August 6.



# NDT Student Hired as Quality Technician at Ventower



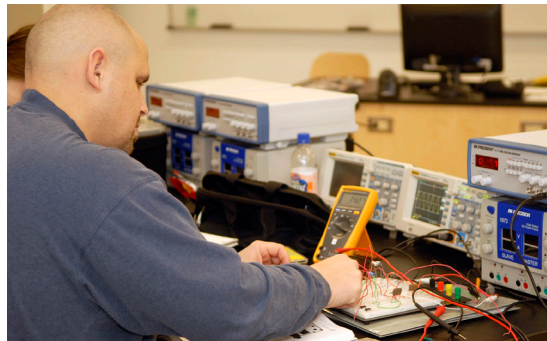
Angela Johnson, a student in the nondestructive testing certificate program, recently was hired by Ventower Industries, a leading North American steel fabricator currently specializing in utility-scale wind turbine tower solutions, as a quality technician. Johnson had already attained an associate of applied science degree but aspired to gain more skills and

credentials in a field that is in high demand. She was introduced to the NDT program by Eric Sorg, an adjunct MCCC instructor and DTE Energy employee. She began taking classes in the program in the fall of 2015.

## Two Electronics Programs Merge into NEW 'Electrical Engineering Technology' Program

The electronics curriculum at Monroe County Community College has changed: Two programs, electronics and computer technology and industrial electricity and electronics, have been merged into one program called electrical engineering technology.

This was done for several reasons. There were only a few courses that differentiated the two original programs, and most students ended up taking both sets of course requirements



anyway. In addition, the program is set up with transferability of credits in mind. The goal will be for students to be able to

transfer the entire degree to a four-year college or university with which MCCC has an articulation agreement and complete a bachelor of science in electrical engineering technology. This could be achieved in just two additional two years through what is commonly known as a "2+2" agreement.

## DUBOIS PARTICIPATES IN 2016 MANUFACTURING SYMPOSIUM

Marty Dubois represented MCCC at the 2016 Manufacturing Symposium, held March 24-25 at Ford Field in Detroit. The event was hosted by Siemens and Electromatic and included nearly 100 technical seminars, more than 40 vendors on two exhibition floors, one-on-one discussions with top industry experts and networking opportunities. DuBois participated in meetings to investigate formal transfer agreements between programs at MCCC and local universities.



2016 Manufacturing Symposium, Ford Field, Detroit

## Two ASET Faculty Receive Certified SolidWorks Associate Status

MCCC Applied Science and Engineering Technology Division faculty Tom Harrill and Marty Dubois recently completed the requirements to earn the Certified SolidWorks Associate certificate. Solidworks is a three-dimensional parametric modeling program that is widely used in numerous industries.

*Tom Harrill, left, displays a vacuum attachment for pet grooming that was designed using SolidWorks and fabricated on MCCC's rapid prototyping 3D printer. To his right is Marty DuBois.*





## ASET Course Offerings:

Term	Subject	Section Name	Credits	Billing Credits	Short Title	Start Time	End Time	Days
FALL 2016	TECH	TECH-296-01/ AST-101-01	3	3	Introduction to Automotive Service	7:00 PM	8:55 PM	M / W
FALL 2016	TECH	TECH-296A-01/ AST-103-01	4	5	Electrical Systems II	8:15 AM	9:30 AM	M/TU/W/TH
FALL 2016	TECH	TECH-296B-01/ AST-125-01	4	7	Steering and Suspensions	5:00 PM	6:55 PM	TU/TH
FALL 2016	TECH	TECH-296C-01/ AST-105-01	3	4	Automotive Engine Theory	7:00 PM	9:55 PM	TU/TH
FALL 2016	AUTO	AUTO-101-01	4	6	Internal Combustion Engines	7:00 PM	9:55 PM	TU/TH
FALL 2016	AUTO	AUTO-104-01	3	4	Automotive Ignition Systems	5:00 PM	6:55 PM	M/W
FALL 2016	AUTO	AUTO-107-01	4	6	Automotive Chassis Units	5:00 PM	6:55 PM	TU/TH
FALL 2016	CONM	CONM-100-01	3	4	Intro to Design/Construction	5:30 PM	7:25 PM	TU/TH
FALL 2016	CONM	CONM-101-01	3	4	Materials of Construction	5:30 PM	7:25 PM	M/W
FALL 2016	CONM	CONM-160-01	3	3	Green Building & LEED System	7:30 PM	10:25 PM	TU
FALL 2016	CONM	CONM-202-01	3	3	Construction Safety	7:00 PM	9:55 PM	TH
FALL 2016	CONM	CONM-120-01	3	4	Introduction to AutoCAD	7:30 PM	9:25 PM	M/W
FALL 2016	ELEC	ELEC-156-01	3	4	Intro to Renew Energy Systems	6:00 PM	7:55 PM	M/W
FALL 2016	MDTC	MDTC-228-01	3	3	Intro to SolidWorks-CSWA	5:30 PM	7:30 PM	M/W
FALL 2016	MDTC	MDTC-232-01	3	3	Adv SolidWorks-CSWP	5:00 PM	6:55 PM	TU/TH
FALL 2016	MECH	MECH-102-01	4	6	Manufacturing Processes	7:00 PM	9:55 PM	TU/TH
FALL 2016	MECH	MECH-103-01	4	6	Machining Basics & CNC	9:00 AM	11:55 AM	TU/TH
FALL 2016	MECH	MECH-103-02	4	6	Machining Basics & CNC	4:00 PM	6:55 PM	M/W
FALL 2016	MECH	MECH-105-01	3	4	CNC III	7:00 PM	8:55 PM	M/W
FALL 2016	MECH	MECH-111-01	3	4	Introduction to Fluid Power	5:00 PM	8:55 PM	M
FALL 2016	MECH	MECH-112-01	3	4	Pneumatics	9:00 AM	12:55 PM	S
FALL 2016	MECH	MECH-201-01	3	4	CAD/CAM I	3:00 PM	4:55 PM	TU/TH
FALL 2016	MECH	MECH-221-01	3	4	CAD/CAM II	5:00 PM	6:55 PM	TU/TH
FALL 2016	METC	METC-170-01	3	6	Introduction to CATIA	7:00 PM	9:55 PM	TU/TH
FALL 2016	METC	METC-270-01	3	4	Advanced CATIA	7:00 PM	8:55 PM	TU/TH
FALL 2016	NUET	NUET-105-01	2	3	Radiography - Level I	7:00 PM	9:55 PM	M
FALL 2016	NUET	NUET-107-01	2	3	Ultrasonic - Level I	9:00 AM	11:55 AM	S
FALL 2016	NUET	NUET-130-01	3	4	Plant Systems I	5:00 PM	6:55 PM	TU/TH
FALL 2016	QSTC	QSTC-115-L1	3	3	Statistical Process Control	ONLINE	ONLINE	ONLINE
FALL 2016	QSTC	QSTC-120-L1	3	3	Intro to Quality Systems	ONLINE	ONLINE	ONLINE
FALL 2016	WELD	WELD-100-01	4	6	Intro to Welding Processes	6:00 PM	9:00 PM	M/W
FALL 2016	WELD	WELD-100-02	4	6	Intro to Welding Processes	9:00 AM	2:55 PM	S
FALL 2016	WELD	WELD-100-03	4	6	Intro to Welding Processes	2:00 PM	4:55 PM	TU/TH
FALL 2016	WELD	WELD-115-61	12	16.67	Entry Level Welding	5:00 PM	9:55 PM	M/TU/W/TH/F
FALL 2016	WELD	WELD-215-01	12	16.67	Advanced Level Welding	8:00 AM	12:55 PM	M/TU/W/TH/F



**MONROE COUNTY  
COMMUNITY COLLEGE**

enriching lives

## QUESTIONS ABOUT THIS PUBLICATION

CONTACT:

**Cameron Albring**, Applied Science  
and Engineering Technology Division  
[calbring@monroeccc.edu](mailto:calbring@monroeccc.edu)

734-384-4112 or

**Joe Verkennes**

Editor/Director of Marketing  
and Communications

Monroe County Community College  
[jverkennes@monroeccc.edu](mailto:jverkennes@monroeccc.edu)

734-384-4201