MONROE COUNTY COMMUNITY COLLEGE

TECH UPDATE

NEWS FROM THE APPLIED SCIENCE AND ENGINEERING TECHNOLOGY DIVISION

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INSIDE

MCCC Receives National Science Foundation Grant for Advanced Welder Education

MCCC RECEIVES NATIONAL SCIENCE FOUNDATION GRANT FOR NEARLY $225,000

Monroe County Community College has received a $224,906 grant from the National Science Foundation for a project titled "Advanced Welder Education" with the goal of increasing the region's supply of qualified welders with advanced levels of education who can further research, development and innovation in the field. The three-year project starts June 1, 2018, and ends May 31, 2021.

"This award builds on the momentum created by four years of grant-funded welding training completed by MCCC earlier this decade through a $1.79 million Department of Labor Community-Based Job Training Grant," said Dr. Kojo A. Quartey, MCCC president. "Through that grant, we certified 238 students as entry- or advanced-level welders based on American Welding Society standards and provided a much-needed boost in qualified welders to reduce the skills gap in the region. However, there is more work that needs to be done to fill this need."

According to 2017 statistics from the Workforce Intelligence Network, there are 5,000 new job postings for skilled trades workers in Southeast Michigan, and total employment for these industries is about 113,000 workers. Half of these workers are welders, fabricators, and tool and die makers.

By using the funds provided by the NSF grant, MCCC will transition the offering of entry-level welding instruction, known as AWS-QC-10, to area high schools, said Parmeshwar (Peter) Coomar, dean of MCCC's Applied Science and Engineering Technology Division. While the college will still offer some entry-level welding classes, its focus will be on teaching advanced-level welding standards (AWS-QC-11) and incorporating the latest additions to these standards recently set forth by the American Welding Society.

Partnering with local high school career and technical education instructors to help them implement the entry-level welding (AWS-QC-10) standards at the high schools will help MCCC develop a direct articulation credit pathway so that students can earn up to 10 credits toward MCCC's welding program while still in high school.

MCCC was one of 70 out of 240 such grant applications that received funding from NSF. According to Coomar, there will be two more rounds of awards after this award period ends. This could result in additional $600,000-$1 million in grant awards should MCCC wish to apply for further funding as a follow-up to this grant project.

MCCC's successful NSF grant award was made possible through a partnership with the Monroe County Intermediate School District and support from SEMCA, the local Michigan Works! agency, and regional companies including Ventower Industries, Baker's Gas and Welding Supplies Inc., RoMan Manufacturing Inc., the National Center for Welding Education (an NSF-funded center) and the American Welding Society.

To begin the process of offering the AWS-QC-10 entry-level welding instruction at area high schools, MCCC will offer an American Welding Society (AWS QC10) Welding Certification Teacher Workshop in August. The workshop is funded by the NSF grant (NSF Division of Undergraduate Education No. 181078) and is for high school welding teachers or other high school teachers interested in teaching welding or interested in the AWS-QC-10 certification process.

The workshop will be held in the Career Technology Center on MCCC's Main Campus at 1555 S. Raisinville Rd. in Monroe run from August 7-19 and 14-16. The workshop will meet from 8 a.m.-4:30 p.m. each day. A stipend of $1,200 will be paid to each high school teacher who participates in workshop.

Workshops are also being planned for 2019 and 2020. For details, please contact Cameron Albring at 734-384-4112

Hawley Obtains Certified Solidworks Expert Certification

Mechanical design technology graduate Kody Hawley recently obtained the highest level of SolidWorks certification, Certified SolidWorks Expert.

SolidWorks is three-dimensional, parametric modeling, computer-aided design software that is used by more than 3.7 million people worldwide. SolidWorks certifications are sought after by design and engineering facilities locally and nationally.

While there are multiple certifications offered through SolidWorks there are three main certifications; the Certified SolidWorks Associate (CSWA), the Certified SolidWorks Professional (CSWP), and the Certified SolidWorks Expert (CSWE). There are approximately 200,000 CSWAs, 90,000 CSWPs and 3,415 CSWEs worldwide.

"Less than 1 percent of SolidWorks users have obtained the expert level of certification," said Dr. Dean Kerste, professor of mechanical design technology, said. "Kody's status as a CSWE demonstrates his level of competence and knowledge in the software. This certification opens many doors for new career opportunities."

In order to be a candidate for the CSWE certification exam, an individual must be CSWP-certified and also pass 4 of 5 advanced certifications. The advanced certifications are sheet metal, weldments, surfacing, mold tools and drawing tools.

A CSWE is an individual who is well-rounded in the knowledge of all areas of the SolidWorks software and able to solve practically any modeling problem. Such an individual is traditionally the "go-to" SolidWorks user among his or her colleagues, Kerste said.

Hawley graduated from MCCC in the spring and plans to begin work on his bachelor's degree in mechanical engineering in the fall at the University of Toledo. He has been employed at Great Lakes Aerial as a design specialist for the past three years. He is the son of Tom and Linda Hawley and lives in Monroe.

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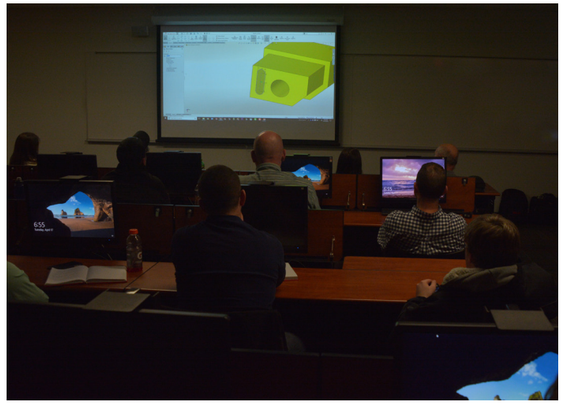
SOLIDWORKS USER GROUP CONFERENCE AT MCCC

In April, the Applied Science and Engineering Technology Division hosted the 9th-annual Southeast Michigan and Northwest Ohio SolidWorks User Group Conference. More than 100 were in attendance. SolidWorks is three-dimensional, parametric modeling software that is widely used in mechanical design and engineering applications. There are more than 28,000 educational institutions teaching the software in 80 countries. There are also more than 260 SolidWorks user groups worldwide.



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,

"The user group provides a venue for our students but also brings in regional employers in the design and engineering fields," said Dr. Dean Kerste, professor of mechanical design technology and leader of the user group. "For many of these employers, this is their first exposure to MCCC and the offerings of the ASET Division."

For more information regarding future user group meetings, please contact Kerste at dkerste@monroeccc.edu

KERSTE ATTENDS SOLIDWORKS WORLD CONFERENCE

Dr. Dean Kerste, professor of mechanical design technology, recently attended the SolidWorks World 2018 Conference in Los Angeles. The conference brought together more than 5,000 engineers and designers from across the globe. It provides an opportunity to network, learn share and discover the latest in SolidWorks 3D applications and engineering technologies. The four-day agenda featured keynote presentations on the kind of technology, business and sustainability breakthroughs that inspire engineers and designers to innovate.

Welding Students Create Fire Pit for SMCC Auction

Monroe County Community College's welding program students recently fabricated and donated a fire pit, valued at $400, to St. Mary Catholic Central High School for its auction fundraiser. This was made possible through a steel donation from Roush Industries.

MCCC Welding Students Win 5 Medals at State Competition

Monroe County Community College welding students took home five medals at the SkillsUSA State Leadership and Skills Conference in late April.

At the conference, which was held in Grand Rapids, MCCC students competed among 1,500 other students who were prepared by 500 business and industry leaders.

- **Tony Simko** of Monroe earned a gold medal for his performance in the MIG welding Competition. Simko is a freshman working toward an associate degree in welding technology.
- **Hunter Chandler** of Ida earned a silver medal for his performance in MIG welding. Chandler is a dual enrolled student at MCCC through the Ida Middle College program and is working on completing his American Welding Society QC10 certification.
- **Brandon Turner** of Monroe earned a silver medal for his performance in the overall welding competition, which includes thermal cutting applications. Turner is a sophomore working toward an associate degree in welding technology.
- **Wyatt Liedel** of Dundee earned a silver medal for his performance in the stick welding competition. He is a freshman working toward an associate degree in welding technology.
- **Cameron Jones** of Monroe, earned a bronze medal for in the stick welding competition. Jones is a freshman working toward an associate degree in welding technology.

The students' trip to Grand Rapids for the conference was made possible with sponsorship support from DTE Energy, Ventower Industries, and Bakers Gas & Welding Supplies, Inc.

LARMOR, ISHAM ATTEND MICHIGAN AUTOMOTIVE TEACHERS ASSOCIATION TRAINING

In April, the college's automotive service program coordinator, Jack Larmor, and adjunct automotive service instructor Scott Isham attended the Michigan Automotive Teachers Association Training Seminar at Lansing Community College. The training seminar fulfilled annual training updates required by the National Automotive Technicians Education Foundation. The next MATA Seminar will be held at Baker College of Clinton Township in May 2018.

MCCC OFFERS NEW PRE-APPRENTICESHIP AND SKILLED TRADES READINESS PROGRAM

Monroe County Community College is offering a new Skilled Trades Readiness Program this summer that may be free to those who qualify through the Advance Michigan Catalyst, a $6 million, four-year grant provided by the U.S. Department of Labor to train Michigan workers in advanced manufacturing.

The focus of the Advance Michigan Catalyst is a large variety of occupations including robotics technicians and engineers, CNC/CCMTO technicians; mechatronics, photonics, industrial maintenance, electro-mechanical, industrial and mechanical engineering technicians; commercial/industrial designers, and robotic welders/solderers.

The program offered by MCCC will provide individuals with the foundational skills for a career in the manufacturing skilled trades or to begin an apprenticeship. Successful completion demonstrates that a student has the aptitude for specialized training and success in a professional career in the skilled trades.

Two tracks are being offered: the pre-apprenticeship manufacturing trades track (non-credit) and the welder training certification track (credit).

The noncredit pre-apprenticeship track includes shop arithmetic, machine tool blueprint reading, trade-related preparation and the OSHA 10-Hour Training Course-General Industry Version. Those who successfully complete it will receive a certificate of completion from MCCC, OSHA 10-General Industry Certification and interviewing opportunities with the Michigan Works! Association. For additional information, contact Barry Kinsey, director of workforce development at bkinsey@monroeccc.edu or (734) 384-4124.

The welder certification track is a 10-week, for-credit American Welding Society welding training certification offered by MCCC – a member of AWS's Schools Excelling through National Skills Standards Education – and designed to prepare an individual to begin career in welding. Areas covered in this program are oxy-fuel cutting, shielded metal arc welding, gas metal arc welding and gas tungsten arc welding.

Those who successfully complete the welder track will receive 12 academic credits, AWS Entry Level Welding Certification (conforms to AWS QC-10 standard), and interviewing opportunities with the Michigan Works! Association and individual companies.

For additional information, contact Cameron Albring, administrative and apprentice programming assistant at calbring@monroeccc.edu or (734) 384-4112.

Chandel Retires After 12 Years of Teaching at MCCC

At the end of the 2017-18 academic year, Dr. Roop Chandel retired from his position as professor of materials and welding technology with Monroe County Community College. Chandel has long been considered an outstanding and caring professor who developed and taught an excellent curriculum in the field of materials and welding technology for 12 years. In total, Chandel taught for a total of 43 years in various institutions all over the world. He is also a 9-year Certified Welding Inspector and has demonstrated a high level of professional competence, involvement and dedication through memberships in professional societies such as the American Welding Society, for which he served as a journal editor. We wish him the very best in his future endeavors.

STEM SUMMER CAMPS FOR 2018

While some Science, Technology, Engineering and Math Summer Camps are already underway, there are still two yet to come. For registration info, go to http://www.monroeccc.edu/summercamps.htm.

3D CADdesign Camp - $24

This camp will give campers a look into some of the skills and tools used in the mechanical design process. You will learn about 2D drawing, using the DraftSight software as well as create 3D drawings and animations using SolidWorks. In addition, you will get to see how 3D printers create models.

For boys and girls grades 8 – 12

DRFTG 732-81:
Mon – Fri, July 9 – 13 9:30 a.m. – Noon and

DRFTG 732-82:
Mon – Fri, July 9 – 13 1 – 3:30 p.m.

Meets in the Career Technology Center, Room T158

Science of Measurement Camp - FREE

The Metrology (measurement science) camp will teach you how to design and run measurement calibrations to determine accuracy, precision, reliability and traceability. Metrology, after all, borrows concepts from physics, math (mostly statistics), chemistry, all kinds of engineering, and even a little biology and medicine at times. Campers will experience hands-on activities and a tour to NSF International in Ann Arbor, MI.

For boys and girls grades 8 – 12

QSTC 774-81:
Mon – Fri, June 25 - 29 9 a.m. – Noon and

QSTC 774-82:
Mon – Fri, June 25 - 29 1 – 4 p.m.

Meets in the Career Technology Center, Room T159

Developing Apprenticeship Programs in Just a Day

In April, the Advance Michigan Center for Apprenticeship Innovation's first-ever Apprenticeship in a Day pilot took place at Southeast Michigan Community Alliance in Taylor. The Apprenticeship in a Day event was the result of collaboration between AMCAI, the Department of Labor Office of Apprenticeship, Southeast Michigan Community Alliance, and the Michigan Educators Apprenticeship and Training Association.

The purpose of the Apprenticeship in a Day concept is to give employers the opportunity to engage with all partners necessary to develop and launch a Registered Apprenticeship program in one place, at one time.

Patrick Lambrix of the TWB Corporation was just one of the participating employers who had the chance to fully develop a Registered Apprenticeship program and have the Office of Apprenticeship to sign off on it in a single day.

The pilot included a brief introduction by Janene Erne, apprenticeship administrator for the Workforce Intelligence Network and president of MEATA, and Russ Davis, state director of the Office of Apprenticeship. Participants were led through the nuts and bolts of a Registered Apprenticeship program by Dave Jackson, apprenticeship and training representative for the Office of Apprenticeship and were given opportunities to work directly with the office to customize and finalize their Registered Apprenticeship Standards.

U.S. Department of Labor office of Apprenticeship State Director, Russ Davis, Cameron Albring, Steve Mihalec (MIWORKS), Patrick Lambrix (TWB Corp.) US DOL Office of Apprentice Training Representative, Marc DeCoster and Collin Mays (SEMCA).

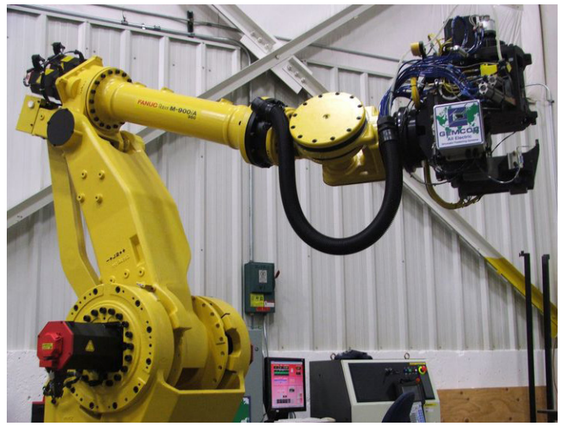
Dubois Attends FANUC Robotics Course; MCCC to Offer FANUC Certification in 2019

Marty Dubois, professor of mechanical engineering technology, attended FANUC's Robotics Handling Tool Operation and Programming class in Rochester Hills from May 7-10. The class consisted of four days of lectures, demonstrations and hands-on lab exercises with FANUC robots.

The course is part of the FANUC Certified Training program. FANUC certified education programs provide industry-relevant training and competency-based skills development across the FANUC CNC and robotics product lines. FANUC collaborates with other industry technology leaders in automation, advanced manufacturing, the connected enterprise and education to develop a certification program that addresses the needs of employers and aligns with secondary and post-secondary programs of study.

With more than 400,000 industrial robots installed worldwide, FANUC is the most common platform in manufacturing for industrial robots. When students enter the workforce, chances are they will be working on a FANUC CNC or robot. Students trained on FANUC equipment will be better equipped to hit the ground running and be productive from the start.

MCCC intends to begin offering Fanuc Certification in Robotics starting in 2019.



MCCC AT ROUSH OPEN HOUSE

On June 7, Auto Service Coordinator, Jack Larmor, current automotive student Austin Marvin and part-time faculty, Paul Bowser, recruit at Roush Industries Open House and Cruise In Night.

MANUFACTURING BOOTCAMP

A major goal of Monroe County Community College is to assist, provide and collaborate in solving the skills gap issue, especially in the manufacturing area. In March, the college hosted a manufacturing Boot Camp, a 6-week program instructed by faculty from the ASET Division who provided training opportunities with both classroom and hands-on instruction related to 3D CAD modeling software, robotics and automation, electronics, welding and machining.

Participants were also exposed to personal soft skills and resume writing opportunities required for specific careers.

More than 18 participants finished the program and are now workforce ready. The Boot Camp culminated in a graduation ceremony with local companies and industry present.

ASET Division Fall 2018 Course Offerings – Classes begin August 22, 2018!

Section Name		Credits	Billing Credits	Short Title	Start Time	End Time	Days
FL2018	AST-101-01	3	4	Intro to Automotive Service	4:30 PM	6:25 PM	MW
FL2018	AST-101-02	3	4	Intro to Automotive Service	8:00 AM	9:20 AM	MTUW
FL2018	AST-102-01	4	5	Electrical Systems I	7:00 PM	9:25 PM	MW
FL2018	AST-120-01	4	6	Brake Systems	6:30 PM	9:25 PM	TUTH
FL2018	AST-202-01	4	7	Engine Performance I	6:30 PM	9:55 PM	MW
FL2018	AUTO-101-01	4	6	Internal Combustion Engines	4:00 PM	6:55 PM	MW
FL2018	AUTO-107-01	4	6	Automotive Chassis Units	5:00 PM	7:55 PM	TUTH
FL2018	CONM-100-01	3	4	Intro to Design/Construction	5:30 PM	7:25 PM	TUTH
FL2018	CONM-101-01	3	4	Materials of Construction	5:30 PM	7:25 PM	MW
FL2018	CONM-160-01	3	3	Green Building & LEED System	6:00 PM	8:55 PM	TU
FL2018	CONM-202-01	3	3	Construction Safety	7:30 PM	10:25 PM	TH
FL2018	ELEC-125-01	3	4	Fundamentals of Electricity	10:00 AM	11:55 AM	MW
FL2018	ELEC-125-02	3	4	Fundamentals of Electricity	1:00 PM	2:55 PM	MW
FL2018	ELEC-125-03	3	4	Fundamentals of Electricity	5:00 PM	6:55 PM	TUTH
FL2018	ELEC-125-04	3	4	Fundamentals of Electricity	7:00 PM	8:55 PM	MW
FL2018	ELEC-129-01	4	6	AC/DC Motors and Controls	7:30 PM	10:25 PM	MW
FL2018	ELEC-130-01	3	4	Introduction to PLCs	5:00 PM	6:55 PM	TUTH
FL2018	ELEC-130-02	3	4	Introduction to PLCs	9:00 AM	10:55 AM	TUTH
FL2018	ELEC-133-01	4	6	Circuit Analysis	4:00 PM	6:55 PM	MW
FL2018	ELEC-135-01	4	6	Digital Electronic Logic	9:00 AM	11:55 AM	TUTH
FL2018	ELEC-137-01	4	6	Microprocessors	7:00 PM	9:55 PM	TUTH
FL2018	ELEC-156-01	3	4	Intro to Renew Energy Systems	5:30 PM	7:25 PM	MW
FL2018	MATH-160-B1	2	3	Math Applications in Eng Tech	2:00 PM	3:30 PM	TU
FL2018	MATL-101-01	3	4	Industrial Materials	7:00 PM	8:55 PM	TUTH
FL2018	MDTC-109-01	2	2	Mechanical Blueprint Reading	5:00 PM	6:55 PM	TU
FL2018	MDTC-160-01	4	6	Mech Drftg & CAD I	1:30 PM	4:25 PM	MW
FL2018	MDTC-160-02	4	6	Mech Drftg & CAD I	9:00 AM	11:55 AM	TUTH
FL2018	MDTC-160-03	4	6	Mech Drftg & CAD I	7:00 PM	9:55 PM	TUTH
FL2018	MDTC-226-01	3	3	Geometric Dimen-Tolerancing	4:30 PM	5:55 PM	MW
FL2018	MDTC-228-01	3	4	Intro to SOLIDWORKS-CSWA	1:30 PM	3:25 PM	TUTH
FL2018	MDTC-232-01	3	4	Adv SOLIDWORKS-CSWP	4:00 PM	5:55 PM	TUTH
FL2018	MDTC-236-01	4	6	Rapid Prototyping	6:00 PM	8:55 PM	MW
FL2018	MECH-102-01	4	6	Manufacturing Processes	7:00 PM	9:55 PM	TUTH
FL2018	MECH-103-01	4	6	Machining Basics & CNC	9:00 AM	11:55 AM	MW
FL2018	MECH-103-02	4	6	Machining Basics & CNC	7:00 PM	9:55 PM	MW
FL2018	MECH-105-01	3	4	CNC III	5:00 PM	6:55 PM	MW
FL2018	MECH-111-01	3	4	Introduction to Fluid Power	5:00 PM	8:55 PM	M
FL2018	MECH-131-01	3	4	Intro Automated Manufacturing	7:00 PM	8:55 PM	TUTH
FL2018	MECH-221-01	3	4	CAD/CAM II	5:00 PM	6:55 PM	MW
FL2018	METC-100-L1	3	3	Intro to Engineering & Tech			TBA
FL2018	METC-170-01	3	6	Intro to Parametric CAD/CATIA	7:00 PM	9:55 PM	TUTH
FL2018	METC-220-01	4	6	Statics & Strength of Material	4:00 PM	6:55 PM	MW

Section Name		Credits	Billing Credits	Short Title	Start Time	End Time	Days
FL2018	METC-234-01	4	6	Thermodynamics & Fluid Science	7:00 PM	9:55 PM	MW
FL2018	NUET-100-01	2	3	Nuclear Industry Fundamentals	7:00 PM	8:30 PM	MW
FL2018	NUET-130-01	3	4	Plant Systems I	7:00 PM	8:55 PM	TUTH
FL2018	QSTC-115-L1	3	3	Statistical Process Control			TBA
FL2018	QSTC-120-L1	3	3	Intro to Quality Systems			TBA
FL2018	QSTC-150-B1	3	4	Introduction to Metrology	5:00 PM	6:55 PM	MW
FL2018	WELD-100-01	4	6	Intro to Welding Processes	2:00 PM	4:55 PM	MW
FL2018	WELD-100-02	4	6	Intro to Welding Processes	6:00 PM	8:55 PM	TUTH
FL2018	WELD-101A-01	2	3	Introduction to GMAW	5:30 PM	9:25 PM	MW
FL2018	WELD-101A-02	2	3	Introduction to GMAW	8:00 AM	3:55 PM	S
FL2018	WELD-101B-01	2	3	Basic SMAW	5:30 PM	9:25 PM	MW
FL2018	WELD-101B-02	2	3	Basic SMAW	8:00 AM	3:55 PM	S
FL2018	WELD-102-01	6	8	Advanced SMAW	5:30 PM	9:25 PM	MW
FL2018	WELD-102-02	6	8	Advanced SMAW	8:00 AM	3:55 PM	S
FL2018	WELD-102A-01	2	3	Multi-Pass Arc Welding	5:30 PM	9:25 PM	MW
FL2018	WELD-102A-02	2	3	Multi-Pass Arc Welding	8:00 AM	3:55 PM	S
FL2018	WELD-102B-01	2	3	Code Welding Techniques	5:30 PM	9:25 PM	MW
FL2018	WELD-102B-02	2	3	Code Welding Techniques	8:00 AM	3:55 PM	S
FL2018	WELD-102C-01	2	3	Multi-Pass Pipe Fillet Welding	5:30 PM	9:25 PM	MW
FL2018	WELD-102C-02	2	3	Multi-Pass Pipe Fillet Welding	8:00 AM	3:55 PM	S
FL2018	WELD-103-01	3	4	Intro to Automotive Service	6:00 PM	8:55 PM	MW
FL2018	WELD-104A-01	4	5	Electrical Systems II	5:00 PM	8:25 PM	MW
FL2018	WELD-104A-02	4	7	Heating and Air Conditioning	5:30 PM	9:55 PM	TUTH
FL2018	WELD-104B-01	3	4	Automotive Digital Electronics	5:00 PM	9:55 PM	MW
FL2018	WELD-104B-02	3	4	Surveying	6:30 PM	9:25 PM	TUWTH
FL2018	WELD-104C-01	3	4	Intro to AutoCAD for Archture	5:30 PM	9:25 PM	MW
FL2018	WELD-104C-02	3	3	Med Voltage Power Dist Systems	5:30 PM	8:55 PM	TUTH
FL2018	WELD-104D-01	2	2	National Electrical Code	8:30 AM	12:15 PM	TUTH
FL2018	WELD-104D-02	3	3	Plant Layout/Material Handling	4:30 PM	7:55 PM	W
FL2018	WELD-106-01	3	4	Pneumatics	5:00 PM	9:55 PM	TH
FL2018	WELD-106-02	2	3	PT & MT	5:30 PM	9:25 PM	TUW
FL2018	WELD-106A-01	2	3	Visual Testing	5:30 PM	9:25 PM	TUW
FL2018	WELD-106A-02	2	3	Nuclear Plant Experience	8:00 AM	5:00 PM	MTUWTHF
FL2018	WELD-106B-01	4	6	Basic Pipefitting	5:00 PM	9:25 PM	MTUWTH
FL2018	WELD-106B-02	4	6	AWS Qualif/Cert-Entry Level	5:00 PM	9:25 PM	MTUWTH
FL2018	WELD-106C-01	4	6	AWS Qualif/Cert-Adv Level	5:00 PM	9:25 PM	MTUWTH
FL2018	WELD-106C-02	2	3	PT & MT	5:30 PM	9:25 PM	TUW
FL2018	WELD-110-01	2	3	Visual Testing	5:30 PM	9:25 PM	TUW
FL2018	WELD-114-01	2	3	Nuclear Plant Experience	8:00 AM	5:00 PM	MTUWTHF
FL2018	WELD-114-02	4	6	Basic Pipefitting	5:00 PM	9:25 PM	MTUWTH
FL2018	WELD-115-61	4	6	AWS Qualif/Cert-Entry Level	5:00 PM	9:25 PM	MTUWTH
FL2018	WELD-215-61	4	6	AWS Qualif/Cert-Adv Level	5:00 PM	9:25 PM	MTUWTH

MONROE COUNTY COMMUNITY COLLEGE

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