

SKILLED TRADES COMPETITIONS (Thursday, October 19, 2017 at Apollo Career Center)

			Max Students per Session, all schools	No. of Sessions / Session Times	Max No. of Students Per Team	Max Teams per School, all sessions	Total Students per School, all sessions
T1	Advanced Carpentry Competition	Teams of up to 3 students entering the Advanced Carpentry Competition will be challenged with the construction of a Dog House by each team. Teams will be given blueprints, building materials, hand tools and 90 minutes to construct the Dog House. Teams will be judged on accuracy, ability to read and interpret blueprints, workmanship, safety, teamwork and the proper use of tools.	24	2 sessions: 8:30-10:00, 10:30-12:00pm	3	4	12
T2	Automotive Repair Competition	Students will work independently and will be given 3 hours to complete 5 different automotive repair tasks. Scores will be based on completeness, accuracy, and quality of the work performed.	18	1 session: 9am-12noon	1	6	6
T3	Construction Teamwork Challenge	A team of 4 individuals - one each specializing in carpentry, masonry, electrical, and plumbing -- will complete 4 related construction tasks to build a project in no longer than the allotted 3 hours. Scoring will evaluate precision, quality, and accuracy of the work, in addition to time required to complete the assignment, with bonus points awarded for teamwork exhibited.	12	1 session: 9am-12noon	4	1	4
T4	Excavator Rodeo Competition	Each competing student will have approximately 10 minutes to attempt to maneuver an excavator to pick up a basketball and drop it in a basket as often as possible in the time allotted. Scoring will be based on successful performance.	5	3 sessions: 9am-10am, 10am-11am, 11am-12noon	1	15	15
T5	CNC Programming Competition	Students will be given a CNC programming assignment, with a maximum of 3 hours to complete the tasks. Scores will be determined based on accuracy of the code written, and time to complete the task.	8	1 session: 9am-12noon	1	2	2
T6	MIG Welding Competition	Individual welders will be given specifications to complete several MIG welding exercises in the fastest time possible. Scoring will evaluate precision, quality, and accuracy of the welds, in addition to time required to complete the assignment. Maximum time available is 90 minutes.	25	2 sessions: 8:30-10:00, 10:30-12:00pm	1	12	12
T7	Pipe Welding Competition	Individual welders will be given specifications to complete several pipe welding exercises in the fastest time possible. Scoring will evaluate precision, quality, and accuracy of the welds, in addition to time required to complete the assignment. Maximum time available is 90 minutes.	24	2 sessions: 8:30-10:00, 10:30-12:00pm	1	12	12

STEM COMPETITIONS (Friday, October 20, 2017 at the Lima Civic Center)

			Max Students per Session, all schools	No. of Sessions / Session Times	Max No. of Students Per Team	Max Teams per School, all sessions	Total Students per School, all sessions
S1	Bike Physics Showdown	Teams of up to 3 students take turns attempting to navigate as slowly as possible and as far as possible down a 60' course riding on a bicycle, without allowing their feet to touch the ground. Team score is the sum of three team members' performance scores.	30	3 sessions: 9:15-10:05, 10:25-11:15, 11:35-12:25	3	1	3
S2	Build a Tower Crazyness	Teams of up to 3 students attempt to build the highest "tower" possible using only the materials provided. There will be three different heats, each using different materials, which will not be revealed until the beginning of each heat. A team's score is the sum of the measured heights of three constructed towers.	18		3	1	3
S3	Business Simulation Challenge	Teams of up to 3 students run a computerized business model (instructions provided at the beginning of the event) that simulates financial operations for a hypothetical manufacturing company, attempting to maximize profits each quarter for twelve quarters. Students are able to control sales, staff costs, operating expenses, transportation and logistics costs. The team earning the most profits wins the Gold medal.	24		3	1	3
S4	Cupcake Catastrophe	Teams of up to 3 students select cupcake icing challenges, one each, from three different iced cupcake samples presented on large posters -- a simple, a medium difficulty, and a complex icing. Using professional bakery tools, the team ices the three cupcakes against the clock. Final results are scored for such parameters as craftsmanship, neatness, and elapsed time.	30		3	1	3
S5	Engineering in a Box Competition	Teams of up to 3 students are provided with an undisclosed engineering "build" challenge to construct a secret working prototype using only the pieces and parts provided in their sealed cardboard carton. All competing teams are provided the same components, and are tasked to build their prototype to optimize its performance. Team scores are based on best performance measured.	30		3	1	3
S6	Explosion MineCraft Coding Challenge	Teams of up to 3 students will compete in a series of programming tasks based on the Minecraft engine on code.org. Each team member spends 1/3 of the time at the console while the other two team members guide and advise. Scores will be determined based on the team's success following instructions, quality of the code created, and time to complete the tasks.	24		3	1	3
S7	First Robotics Faceoff	Teams of up to 3 students work together to operate a remote-controlled, custom-built 6-foot tall robot, navigate it through an obstacle course against the clock, causing it to pick up a crate and deposit the crate at another destination, all using a modified video game controller.	24	3 sessions: 9:15-10:05, 10:25-11:15, 11:35-12:25	3	1	3
S8	Graphic Design Competition	Students electronically submit graphic design entries in advance of MakerFest for judging by design professionals in one of five categories: Logo/Branding Design or Brochure/Flyer Design, Engineering/CAD Design, Digital Photography, Photography Manipulation, and Computer Animation. Entries will be judged on creativity, use of medium, originality, professionalism, and effectiveness.	NO LIMIT	Submit before MakerFest; 1 judging session Friday, 10am	1	NO LIMIT	
S9	Pallet Furniture Assembly Contest	Teams of up to 3 students work together to create a bookshelf out of pallets and wood pieces, looking only at an existing fully built example and a list of materials required. Tools provided are hammer and nails and a tape measure. Team results will be scored based on time to complete, accuracy, and workmanship.	36	3 sessions: 9:15-10:05, 10:25-11:15, 11:35-12:25	3	1	3
S10	IT Network Assembly Showdown	Teams of up to 3 students attempt to build and configure a operating computer network as quickly as possible from the components provided. Requires a working knowledge of network software, routers, switches, operating systems.	12		3	1	3
S11	Math Madness Brain Challenge	Teams of up to 3 students will compete in a math challenge, attempting to get the highest score for their team by answering the most questions correctly. The level of math skills required to answer the questions will range from basic arithmetic, fractions, and decimals, to algebra, geometric, and statistics.	30	3 sessions: 9:15-10:05, 10:25-11:15, 11:35-12:25	3	1	3
S12	Operation Game Challenge	Teams of up to 3 student identify medical terminology and conditions by placing them accurately on a giant Operation Game Board. The team with the fastest time and most accurate identifications wins the Gold.	30		3	1	3
S13	Paper Airplane Aeronautics Competition	Teams of up to 3 students will create multiple paper airplanes and will take turns attempting to cause their airplane to fly the greatest possible distance down a long hallway. Students will be able to use weights provided by the judges to enhance the performance of their creations.	60	3 sessions: 9:15-10:05, 10:25-11:15, 11:35-12:25	3	1	3
S14	Retro Tinker Toy Design Challenge	Teams of up to 3 students will be given a standard Tinker Toy set, and will be challenged to create several existing designs and one or more original designs against the clock, judged on accuracy following instructions and shortest time to build.	45		3	1	3
S15	STEM Trivia Contest	Teams of up to 3 students will work together to answer STEM trivia questions in the style of "Jeopardy!" from the categories science, technology, engineering, and math. Level of complexity of the questions is "high school-plus."	60		3	1	3
S16	Video Game Design Showdown	Teams of 3 students will receive a sealed envelope containing the name, type and 10-word description of a new video game. In 40 minutes or less, the teams will design the concept and user experience of the original video game, including characters, actions, props, and scoring. Each design team will create and submit a single pencil sketch of the game's playing field and a brief, 100-word-or-less description of the new game's play scenario, plot, length of play, etc. Teams will turn in their game sketch and description at the end of the 40-minute competition. Judges will review and assign points based on creativity, feasibility, and marketability.	30		3	1	3

BREAKOUT SESSIONS & WORKSHOPS (Friday, October 20, 2017, Lima Civic Center)

			Max Students per Session, all schools	No. of Sessions / Session Times	Max Students per School per Session
B1	AcuMax Index Assessment - How Are You REALLY Wired?	Participants take a 5-minute survey and then learn from the results how they are "wired", why they react the way they do to certain situations, and what kinds of jobs are just not a good match for their "wiring".	15	HIGH SCHOOL: 9:15-10:05, 10:25-11:15, 11:35-12:25, COLLEGE: 2:05-2:55pm, 3:05-3:55pm SATURDAY: 10-10:55, 11-11:55	No school limit. First come first served till all seats are filled per session
B2	Amazing Lasers!	From the technical wizards at the Lima Tank Plant, the experts from General Dynamics demonstrate how laser technology has changed everything in manufacturing, and how lasers will continue to rewrite the rules for how things are measured, aligned, configured, and constructed.	35	3 sessions: 9:15-10:05, 10:25-11:15, 11:35-12:25	No school limit. First come first served till all seats are filled per session
B3	Apprenticeships: The Other 4-Year Degree	What it takes to land an apprenticeship in the construction trades, plumbing and pipefitting trade, electrical and welding trades, and why you should care.	10		No school limit. First come first served till all seats are filled per session
B4	Becoming an Electrician! Secrets They Never Told You!	An information discussion from a licensed electrician about what this skilled trade offers its practitioners, how much money you can make, what kind of schooling is needed, and how an apprenticeship in the International Brotherhood of Electrical Workers (IBEW) can ensure you a successful career.	35		No school limit. First come first served till all seats are filled per session
B5	Can You Insure this?	Students get a glimpse into the fascinating world of insurance and how businesses actually put a dollar amount on risk management. State Farm will explain underwriting some crazy real-life risks. Students will attempt to put a price tag on some off-the-wall challenges from insuring magicians like Criss Angel to examining how you insure a celebrity's unique mustache.	35		No school limit. First come first served till all seats are filled per session
B6	Do You Have What It Takes To Be a Project Manager?	There is a huge shortage of trained project managers in construction, in manufacturing, in information technology. And it pays very well. Check out what it takes to be a project manager, and see if this professional achievement might be in the cards for you.	35		No school limit. First come first served till all seats are filled per session
B7	Emergency Repair: First Aid Workshop	Do you know how to wrap a sprained ankle? How about how to take someone's blood pressure and know what it means? You will leave this workshop having done these things and more.	50		No school limit. First come first served till all seats are filled per session
B8	Extreme Interview Makeovers	30-minutes of personal coaching, one-on-one, first an "Extreme Interview Makeover" with a senior HR executive from one of the region's top employers, giving the student personal advice on how to make a great first impression. Then a mock interview with another professional, giving the student the chance to practice what was just learned.	20	No school limit. First come first served till all seats are filled per session	
B9	Home Field Advantage - Choices after High School	If college is not in your plans, you still need a plan. This workshop teaches you what to do if you want to go directly to work after high school and want to make better than minimum wage. Also, discussed are apprenticeships and military enlistment.	40	No school limit. First come first served till all seats are filled per session	
B10	How to Get the Most from a Job Fair	Career fairs and jobs fairs can be an INCREDIBLE opportunity to move your personal situation forward. Or they can be a waste of time. This workshop gives you tips and advice on how to make sure you get the most from the Career Fair/Job Fair at MakerFest.	42	No school limit. First come first served till all seats are filled per session	
B11	How to Know If You're Cut Out to be an Engineer	Engineering is one of the best paying, most sought after professions in the world. But it's NOT for everybody. If you're thinking of possibly getting an engineering degree, this workshop from the experts at Ohio State University give you the truth about what it takes to succeed as an engineer.	35	3 sessions: 9:15-10:05, 10:25-11:15, 11:35-12:25	No school limit. First come first served till all seats are filled per session
B12	I REALLY Want to Be My OWN Boss	So... what does it take to be your own boss? If you are not cut out for working for someone else, this might be the answer. But what's behind the scenes? This team is eager share what they've learned over the years.	36	No school limit. First come first served till all seats are filled per session	
B13	The Magic of Robotics - How to Join this Crazy Game	Robotics have changed the world. And now you can make the study of robotics your major at college. UNOH is offering Robotics as a major emphasis in their technology degree program. Come check out what it would be like to be part of this state-of-the-art program.	50	No school limit. First come first served till all seats are filled per session	
B14	Can You Handle Professional Truck Driving?	There is no professional more in demand right now than a professional truck driver with a Commercial Drivers License (CDL). Everybody's looking to hire them, and the money is quite simply terrific. If you don't know what it takes to do this great gig, check out this breakout session and find out now!	35	No school limit. First come first served till all seats are filled per session	
B15	Tips to a Job-Winning Resume from the Experts	How do you make sure your resume gets noticed? This workshop presents you with tips from the professionals at OhioMeansJobs who deal with hundreds of resumes every week.	35	3 sessions: 9:15-10:05, 10:25-11:15, 11:35-12:25	No school limit. First come first served till all seats are filled per session
B16	What Employers REALLY Want	Even though there are plenty of jobs out there, it's still a VERY competitive game. This workshop explains what employers REALLY want, and what you can do to make sure you are viewed as a very attractive candidate by the employers you are most interested in.	35	No school limit. First come first served till all seats are filled per session	