

TechFest 2012 Exhibits by Location

Location ¹	Acronym ²	Organization ²	Exhibit Description
Great Hall - Building 12			
1	AFTT-TBP	AFTT Tau Beta Pi	Work with a gyroscope, electrodynamics shaker for an airplane model, groundwater flow model plus other aircraft and aeronautic display information items.
2	ASME	American Society of Mechanical Engineers	Learn about mechanical engineering with posters, information and video.
3	NMUSAF	National Museum of the United States Air Force	Fuel Cells: See a working model of a fuel cell while learning about the what, how, when, where and why that are behind this fascinating technology.
4	WSU-PSY	WSU Psychology	Engage with interactive displays and hands-on demonstrations of various psychological principles related to cognition, perception, etc.
5	LMC	Lockheed Martin Corporation	See Lockheed Martin product display with video highlight DVD.
6	GDAIS	General Dynamics Advanced Information Systems	Explore the world of Infrared Energy. You can't see Infrared energy with your eyes, but with a special camera you can! See yourself on a live Infrared camera and get your "Infrared" picture taken. Have fun with IR experiments.
7	UD-GEO	UD Geology - Sigma Gamma Epsilon	Students from the UD SGE student honors fraternity present various geology themed exhibits. Examples include a baking soda/vinegar volcano and fossils/rock demonstration.
8	WSU-SPS	WSU Society of Physics Students	This exhibit will consist of multiple table top physics demonstrations, which exemplify some of the fundamental principles of physics.
9	ABICS	ABICS Publications	Hands-on and legs-on demonstration of physics of soccer and linkage of STEM and sports.
10	ASCE	American Society of Civil Engineers	Hands-on demonstrations of civil engineering concepts to a wide range of ages.
11	SAE	Society of Automotive Engineers - Dayton Section	Interactive learning experience involving the design, construction, and testing of a jet toy car that you can keep. Includes the science of jet propulsion and automotive chassis design.
12	YMCA	YMCA Beavercreek	Learn how to use recycled materials to make music that is pleasing to the ear and show how we, as humans, hear sounds.
13	Kiwanis	Kiwanis Club of Dayton	Kiwanis Club of Dayton serves the children and needy of the Miami Valley.
14	TMS	The Mars Society	Exhibit features the latest images and news about Mars Exploration with members from the Mars Society to answer your questions. Also included are hands-on activities, Mars globes and free handouts giving information about Mars.
15 & Rm119	DARA	Dayton Amateur Radio Association	Introduction to Amateur Radio (aka Ham Radio). We will be assembling FM Radio Kits in Rm 119 and showing a DVD about Ham Radio at Exhibit 15.
16	MVAS	Miami Valley Astronomical Society	Demonstrations and handouts given on astronomy.
17	ACS	American Chemical Society - Dayton Section	The ACS exhibit will 1) make alginate "worms" to demonstrate polymer crosslinking and 2) demonstrate absorption of UV light by sunscreens.
18	WSU-BIO	WSU Biology	Explore the world of biology and the natural sciences. Hands-on experiments, live organisms and new technology in the field of biology.
19	WSU-EES	WSU Earth & Environmental Sciences	Reduce, Reuse, Recycle! Become a more environmentally friendly person. What can be recycled and where do you go to recycle? How can composting help reduce waste? What materials can be reused? Come explore these questions!
20	UD-WISE_LLC	UD Women in Science & Engineering Living & Learning Community	Fun things you can do in science and engineering." We are excited to encourage the next generation of STEM majors!
21	DRSS	Dayton Regional STEM School	What happens when a chemical reaction releases energy? Hands-on activity shows that chemiluminescence is behind fire flies and glow worms! You can also find out more about the Dayton Regional STEM School at the same time.
22	DRSC	Dayton Regional STEM Center	Participants will have an opportunity to modify a balsa wood glider through studying biomimicry.
23	UD-TE	UD Teacher Education	Participants will experience hands on sensory observations in order to match common objects with materials hidden from sight. This is especially interesting for younger children.
24	WU-NNSA	Wilberforce University-NNSA Disaster Management & Recovery Program	Do you have what takes to make it in a disaster? Come see our virtual disaster!!
25	NSBE & SHPE	National Society of Black Engineers - Dayton Alumni Extension & Society of Hispanic Professional	Scientific and engineering-based, hands-on experiments.
26	CSU	Central State University	Enjoy the thrill of creating a cartoon character with the aid of a pantograph!
27	SAMPE	Society for the Advancement of Materials and Process Engineering	Pick a color and make your own Glittery Polymer Super Ball! Learn about how plastics are made and why some are hard and some are stretchy.
28	UD-BIO	UD Biology	Students engage in a hands-on experience with real vertebrate specimens used to prepare for a career in Veterinary Science, Medicine or Biology.
29	UD-ETHOS	UD Engineers in Technical Humanitarian Opportunities of Service-learning	We will have a solar oven, rocket stove and water filter along with ETHOS members to describe how they work.
30	AFTT-ECE	AFTT Electrical & Computer Engineering	Demonstrations of hardware and software for navigation and positioning using wireless devices. Handouts are available showing how solving these problems requires finding the intersections of conic sections.
31	UD-PHYS	UD Physics	An Introduction to Waves.
32	UDCME&AICHE	UD Chemical and Materials Engineering & American Institute of Chemical Engineers	Make GAK - a stringy, slimy, rubbery compound made from common household compounds.
33	CJ-STEMM	Chaminade Julienne High School STEMM Program	Chaminade Julienne students demonstrate hands-on STEMM projects and "Family Engineering" from Michigan Technological University and National Science Foundation activities.
34	IST	InfoSciTex Corporation	Demonstration of the problems caused by delay in real-time control systems and a real world example using an Unmanned Air Vehicle being controlled on the other side of the globe.
35	NPS	National Park Service - Dayton Aviation Heritage National Historical Park	Exploring aviation with the Wright brothers.
36	CHP	Carillon Historical Park	Carillon Historical Park will have an exhibit about the history of Dayton inventions and technology, with an emphasis upon the Wright brothers. We will also have materials related to the various sites managed by Dayton History.
37	ICOD	Inventors Council of Dayton	Fly a 1/32 scale Wright Flyer in a wind tunnel. See fuel cell Car, 3D visualization and vision, robotics, rocket guidance, V2 simulator, solar system simulation. Learn some orbital mechanics. Maybe 3D Printer and CAD/CAM.
38	AEI	Archaeology Education and Illustration	Forensic Reconstruction: Learn the basics of forensic reconstruction and how you can use the clues found in the human skull to help determine its sex, age, ethnicity and health.
39	IEST&ISA	Inst. of Environmental Science and Technology & Instrumentation, Systems, & Automation Society	IEST - Contamination control, design, test and evaluation of equipment and reliability; ISA - batch control, enterprise integration, wireless communications and instrumentation, measurement and control.
40	WoW	Wizards of Wright - WPAFB Educational Outreach	Come join the fun and learn about the many FREE programs offered through the WPAFB Educational Outreach and the Wizards of Wright.
41	TORC	Team Ohio Rocketry Club	The exhibit will showcase the science and sport aspects of model and high power rocketry with explanations of basic rocketry principles and building techniques.
42	SCC-AVT	SCC Aviation Technology	Desktop Flight Training Device (simulator) and aviation maintenance display (parts). Looping PowerPoint presentation.
43	SCC-ACT	SCC Automation and Control with Robotics	Table top display of robots in action and video for guests.
44	CLC	Dayton Challenger Learning Center	Robotic arms that adults and students can manipulate. NASA Space Place and Challenger Center video games. "Fly" an aircraft with our simulation.
45	A&WMA	Air & Waste Management Association - Southwest Ohio Chapter	1) Environmental/Energy Management & Careers; 2) Resource Conservation/Minimization, Pollution Prevention & Sustainability; and 3) Air Quality (Health Risks, Weather, and Climate Change) - think globally, act locally.
46	NOAA & NWS	National Oceanic and Atmospheric Administration & National Weather Service	Hands-on display of how wind speed and direction can be measured. Also see a display of current weather conditions and forecasts for the Dayton area.

47	AMS & NWS	American Meteorology Society - Wright Memorial Chapter & National Weather Service	See tornado video footage, hands-on weather instruments, IR thermometer, educational handouts and a "tornado in a bottle".
48	SCC-CIS	SCC Computer Information Systems	We will have programmable Scribbler robots. The Scribblers can be programmed to dance, react to light, objects and to follow a line.
49	RR	Riverside Research	Demonstration of interactive e-Texts including Remote Sensing, Air Traffic Control and Geodesy. Students can also decipher an encrypted message using clues from partner booths in an intelligence-based scavenger hunt.
50	ASC	Affiliate Societies Council - Creator and Organizer of TechFest	TechFest is funded through ASC. This exhibit has general information on the ASC, Adult TechFest Evaluation Forms, Officer's names who can provide information about TechFest and miscellaneous reference material.
South Hallway - Building 12			
H1	ASQ	American Society for Quality	Measuring quality attributes between two products you buy to see which one is "better". Students can also experiment using hand-held gages to measure the dimensions of several parts and determine what is good or defective.
H2	IIE	Institute of Industrial Engineers	Students choose tasks to get ready for school. Each task has a time. Students must determine the best order and type of tasks to do so that the summary of time is less than 30 minutes and they are not late for school.
H3	PMI	Project Management Institute - Dayton-Miami Valley Chapter	Organize science projects, term papers, team projects and home study for efficiency and success.
H4	SAFE	SAFE Association - Wright Brothers Chapter	The exhibit will consist of an Ejection seat with other associated equipment such as a pressure mat, test dummy, safety equipment such as helmets and restraints, and information.
H5	UD-EO	UD Electro-Optics	Hands-on optics demonstrations for students. This year we will have a simple laser show to illustrate how it is done.
H6	DMA & DACW	Dayton Microcomputer Association & Dayton Association of Computing Women	Crack the case - see what is inside your computer, hard drive, keyboard and mouse. Learn how a computer works and where the data is stored.
H7	DLUG	Dayton Linux User Group	Explore Linux and free software for learning and fun, and take it home with you on a DVD or CD!
H8	OHDELA	Ohio Distance and Electronic Learning Academy	VoiceThread is a cloud application allowing students to leave comments 5 ways: mic, phone, text, audio file, video. Exhibit: students will start story on VoiceThread & each person can add something to the story by posting a response.
H9 in Rm 113	DCM & DMA	Dayton Computer Museum & Dayton Microcomputer Association	The Computer Museum room shows how computer engineering has changed a large room sized computer so that it now fits on your desk or in your pocket. Special this 10th TechFest a 4 hour video series of 1960 to 90's technology.
Earley Auditorium, Rm 172 - Building 12			
E1	BMD	Boonshoft Museum of Discovery	We will layout an FIRST Lego League competition table and show a few different robot runs on the table.
E2	ECoD	Engineers Club of Dayton	Engineers Club volunteers work one-on-one with kids K-10 to solve hands-on problems involving mechanics, codes, math and chemistry. Our exhibit is geared toward having the kids "do" something rather than be "shown" something.
E3	NAHA & ECOD	National Aviation Heritage Alliance & Engineers Club of Dayton	Two flight simulators: one is a simulation of one of the Wright Flyers (1905) and the other simulates flying a modern airplane.
E4	SCC-EEC	SCC Energy Education Center	Three Exhibits: 1. Solar Drag Racers; 2. Remote Earth Moving Equipment; 3. Track Hoe Simulator.
E5	AIAA	American Institute of Aeronautics and Astronautics	Yes, it IS rocket science! Come design and build your own soda-straw rocket, then launch it from our rocket launcher to hit a target and win a prize.
E6	ASSE	American Society of Safety Engineers - Kitty Hawk Chapter	Hands-on experiments with explosive/toxic gas detectors, line locators, indicator tubes, noise dosimeters, radiofrequency alarms, etc.
E7	IEEE	Institute of Electrical and Electronics Engineers	Did you know that play dough conducts electricity? Come see us demonstrate how you can build basic circuits out of play dough.
E8	WSU-CECS	WSU College of Engineering and Computer Science	Come see Wright State's Micro Air Vehicle (MAV). This small airplane, modeled after the dragonfly, will be on display and will perform aerial feats. Find out more about the College of Eng. & Computer Science and play with K'NEX.
E9	COSI	Center of Science and Industry, Columbus - <i>Saturday 10am to 1pm only</i>	COSI's Science Spot exhibit gives you and your family the opportunity to play, explore and learn about science together, which consists of colorful hands-on kiosks that you can learn about basic science concepts as a family!
AIM Center - Building 13			
A1	OSHP	Ohio State Highway Patrol - Crash Reconstruction	Display of tools and techniques used by crash reconstructionists. Interactive experiments that demonstrate the science of crash reconstruction.
A2	PTPD	Perry Township Police Department	Technology being used by local police such as Radar, LIDAR and GPS.
A3	SME	Society of Manufacturing Engineers	Learn about the math and science skills required to program computer numerical controlled (CNC) machinery to produce a miniature baseball bat in Sinclair's Advanced Integrated Manufacturing (AIM) Center.
A4	AWS	American Welding Society	Exhibit of robot used for welding and video of Welding Science and Careers.
A5	GTC	The Greene Town Center	Demonstration of SEGWAY and gyroscope technology including a short ride on a SEGWAY.
A6	DP&L	Dayton Power and Light Company - <i>Saturday only</i>	The presentation features DP&L employees who will discuss electric safety, answer questions and give a demonstration of the power of electricity.

1) Numbered exhibits are in Great Hall, Bldg 12; A = Bldg 13 & AIM Center; E = Earley Auditorium in Bldg 12; H = South Hallway in Bldg 12;

2) SCC = Sinclair Community College; UD = University of Dayton; WSU = Wright State University