

2017 Career Workshop Sessions

Students: Please indicate your top five choices on your registration form.

#	Workshop Title	Career	Description
OD71	Atmospheric Chemistry	Chemistry	Chemistry impacts many areas of our lives, including the environment. Students in this workshop will participate in a hands-on activity to identify the health and climate impacts of atmospheric particles.
OD5	Bones, Bugs & Splints - Oh My!	Nurse/Medical	Take a look into a day in the operating room! From casts, to intubation, to gowns and gloves!
OD60	Breakout EDU	Technology/Engineer	This interactive workshop will have participants using collaboration, problem-solving, and engineering skills to solve a series of challenges to "unlock" the key to stop the Mad Engineer.
OD94	Check the Instructions	Technical Writer/Management	In a complex world, precise written and illustrated instructions save time and make products easier to use. Creating instructions takes collaboration from the entire development team. Our presentation will demonstrate how it's done!
OD105	Creativity in the Tech World	Software Developer	Tech is for creative people too! Do you like to draw? Do you like to write stories? Do you like talking to people and understanding what they like or don't like? These are all skills that many tech professionals use in their careers. Find out how drawing, storytelling, and learning about people relates to a career in user experience design (UXD).
OD10	Cryptography – Toy Ciphers, Secret Codes & More!	Computer Scientist/Math	What is Cryptography? And how do we use it every day? Using skills in math and computer science, we will try to understand a secret message!
OD106	Disease Trackers: Applications of Immunology	Science/Immunologist	Why do people get sick and how do we study diseases in populations? Immunology is the study of the body's immune system and how it responds to pathogens. In this workshop, we'll talk about the various roles of antibodies, a protective protein produced by specific cells of the immune system, and how they can be used to track diseases in populations as well as diagnose infectious diseases during an epidemic.
OD11	DNA – The Genetic Information of Life	Scientist/Researcher	All living organisms have DNA, which is a blueprint for all cellular processes. Learn about the many fascinating things you can extract DNA from, and what scientists have learned from this information. Learn about the different careers that require an understanding of DNA, and extract DNA from fruit!



2017 Career Workshop Sessions

Students: Please indicate your top five choices on your registration form.

#	Workshop Title	Career	Description
OD12	Doctor for a Day	Doctor/Medical	Experience what it is like to be a doctor for a day! Learn about human anatomy by viewing and touching real human specimens. Learn and practice basic physical exam procedures and what it takes to be a doctor!
OD7	Emergency Preparedness: The Zombie Apocalypse	Environmental & Public Health Laboratory Science	The fields of environmental and public health laboratory science are critical to understanding how water quality impacts our lives. Button up your lab coat and discover <i>YOUR</i> field of dreams...or rather, <i>streams!</i>
OD107	Engineer Your World: The Civil Way!	Engineer	Do you know what a Civil Engineer does? Do you want to get your hands dirty and find out? This workshop will introduce you to what a civil engineer does, what education and training you will need, and will end with a fun and messy hands-on activity.
OD72	Firefighting as a Career	Firefighter	What are the challenges of firefighting and how can my school classes help me within this career? We will take a look at the physical laws of science and how it applies to everyday operations within the fire service. Learn how math, science and more can save lives and their important role in dealing with a burning building.
OD47	Holding it All Together	Mechanical Engineer	From hand-held GPS to communicating with the Mars Rover, learn how mechanical engineers at Rockwell Collins put all the pieces together. Test your mechanical skills with a hands-on building competition.
OD108	How Information Technology Can Change Your Life	Information Technology	Explore how the information technology platform of Google can answer any question. Go through a scavenger hunt and use creative methods to find answers. Join us for a fun session!
OD109	How Project Management Impacts Our Daily Lives	Strategic Business Planning	Have you ever wondered how businesses get things done? Come and learn about the careers of project management and strategic business planning and begin to understand the important role these careers play in our everyday lives.
OD93	I Like Math & Science...But I'm Not an Engineer	Supply, Logistics, Costing & Finance	You might be thinking that science, technology, engineering, and math (STEM) skills aren't important because you're not interested in becoming an engineer. But almost <i>all</i> jobs require some STEM-related skills. This workshop will explore opportunities in the fields of supply chain, cost and logistics. Experience each of these fields through the creation, assembly and testing of a product.
OD37	I Want to be a Veterinarian	Veterinarian	So you'd like to be a vet? There is more to being a vet than just giving vaccines to cats and dogs. Learn what happens behind the scenes including how illnesses and conditions are diagnosed
OD110	Innovative Technology in Diabetes Care	Health Care	Have you ever considered working with a specific medical population? This work shop will feature technology available for Diabetic care to maintain a healthy and active lifestyle.



2017 Career Workshop Sessions

Students: Please indicate your top five choices on your registration form.

#	Workshop Title	Career	Description
OD48	It's a Material World	Materials Engineer	Learn how materials make or break the world around us from a Rockwell Collins materials engineer. Test your material knowledge with a fun hands-on challenge.
OD21	It's Not a Stretch – You can be an Engineer, too!	Engineer	Learn how engineers design and make plastics that you encounter every day. Create your own stretchy putty to take home with you.
OD56	Leadership Starts Here	Management/Consultant	STEM is not just about science, technology, engineering and math. It all starts with leadership. Begin identifying and developing leadership skills that will benefit you for the rest of your life.
OD112	Natural Hazards	Geologist	Hurricanes have certainly been in the news this fall so far! As well as the thing that usually affects us here...flooding. The two go hand-in-hand. So why and where do hurricanes form? We will do a hands-on hurricane tracking exercise, learn about the force of hurricane winds, understand how a storm surge differs from natural flooding, and talk about why we increasingly refer to natural hazards as “natural disasters”.
OD111	Outdoor & Nature Nonprofit Professionals	Nature/Science/Non-profit Leadership	If you love the outdoors, enjoy being in nature, are naturally inclined to lead rather than follow, dig sustainable living, and want to see what it takes to work in a male-dominated field, join the women of Iowa's largest non-profit nature center - the Indian Creek Nature Center! We're here to tell you what it takes to find your passion in the non-profit sector, especially in a male-dominated field.
OD25	Pharmacy	Pharmacist	Discover what it is like to be a pharmacist! Learn about filling prescriptions, working with clients and more! Great hands-on activities.
OD26	Physical Therapy	Physical Therapist	Discover how physical therapists use technology and exercise to improve the lives of their patients, whether as result of sports injuries, accidents or medical condition.
OD36	Programming from Scratch	Computer Programmer	Learn about problem solving with programming through an introduction to the MIT Scratch programming software! Students will be able to create their own programming projects and take them home on a flash drive that will also include other resources to expand their computer and programming experience.
OD49	Putting the Power into Electronics	Electrical Engineer	Rockwell Collins produces hand held GPS and radios that communicate with the Mars Rover; learn how electrical and systems engineers power the world and beyond! Test your electrical skills with a hands-on experiment.



2017 Career Workshop Sessions

Students: Please indicate your top five choices on your registration form.

#	Workshop Title	Career	Description
OD98	Science for Nature Lovers	Naturalist	Do words like “forestry”, “conservation” and “environment” make you smile? Well join this hands-on workshop to learn more about careers that support our natural resources.
OD97	Technology in Wildlife Research	Naturalist	Learn about the various technologies used in wildlife research, such as telemetry and mapping. Have the opportunity to handle live animals, such as turtles!
OD55	The CSI of the Hospital	Lab Researcher	What happens to your blood after it is collected? Why are different colored tubes used? Why does your doctor order laboratory testing? Meet the people behind the scenes and find out what really happens to your blood and body fluids! Help diagnose patients and aid the doctor in treatment. After all, 70-80% of any diagnosis starts in the laboratory. It's time to discover the mysteries the body holds.
OD14	The Face Behind the Mask	Nurse/Medical	Participate in a mock surgery with suturing or stitching, breathing tube insertion, and electrocautery (clotting or stopping bleeding).
OD17	The Fruit Shapes Adventure	Food Engineer	Participate in the fun processing steps to make fruit shapes. Learn about equipment needed, ingredients used, and how the product looks at various stages—including sensory taste testing of the final product!
OD35	There Is Science In My Make-up	Chemist/Engineer	Learn the chemistry behind what makes cosmetics look, smell, and feel good. Then make your own lip gloss, bath salts and shower gel to take home with you!
OD90	Uncovering the Possibilities with Code	Software Developer	We'll look at all the career opportunities in code -- from science, to music, medicine, art, engineering and everything in between. We'll also get our hands dirty and dive right into some code!
OD82	Vision Therapy – Improving Vision with Exercises	Optometry	Nearly all humans are born with the potential for good eyesight, but vision – the ability to identify, interpret and understand what is seen – is learned and developed, starting at birth. Learn about optometry and how vision therapy trains the entire visual system which includes eyes, brain and body.
OD39	Weather Wonders	Meteorology	Cold fronts, warm fronts, hurricanes, tornados, blizzards...weather is constantly impacting our lives. Learn how to forecast and present the weather!
OD57	We Build This City: Design Like an Architect	Architect	Working in a team and using various design tools, such as sketching, model making and writing, you will design a city community center. The site, size and building needs will be established by your “client”. It will be up to your team to respond to these needs in a creative and inspiring way! Let's build!
OD74	Women in Law Enforcement	Public Safety	Why there aren't more women in law enforcement and how you can better prepare yourself to compete in this field.



2017 Career Workshop Sessions

Students: Please indicate your top five choices on your registration form.

#	Workshop Title	Career	Description
OD100	Wild Card		Workshop sessions are sometimes added to the conference after registration materials are posted. If you like surprises, request this session number on your registration form! Possibilities may include geologist, city planner, radiologist, banker, or other exciting STEM+ careers!

