

## 1 ANSCHUTZ - AEC 103

### Data-driven Modeling Lab @ UCSS

Create a Sorting Hat - collect quotes from Harry Potter characters, and sort these using machine learning AI to put you in a Hogwarts house based on what you say. Shows at 10:15 and 11:15 am, best for older students.

## AEC 102 & OUTSIDE

### UCCS American Institute of Aeronautics & Astronautics

Learn about Cubesat communication and Chaldni plates and launch Alka-Seltzer rockets outside.

## AEC 2ND FLOOR OUTSIDE

### UCCS Math Dept.

Electricity and water don't usually mix, but watch as we demonstrate magnetic levitation!

## 2 BERGER HALL

### iFLY Colorado Springs

Learn about the forces that make indoor skydiving possible in our mini wind tunnel.

**Crew Concept Inc** Drone Soccer exhibition- like Quidditch except pilots operate remote-controlled aircraft.

### Schriever Space Force Base & Ft. Carson School Liason's Program

Use iPads to navigate a Sphero robot around ramps on an obstacle course.

### Monumental Impact / The MITEE Network

Experience our FIRST Tech Challenge Team's robotics, AI artwork, AI Reaction Emotion and 3D printing.

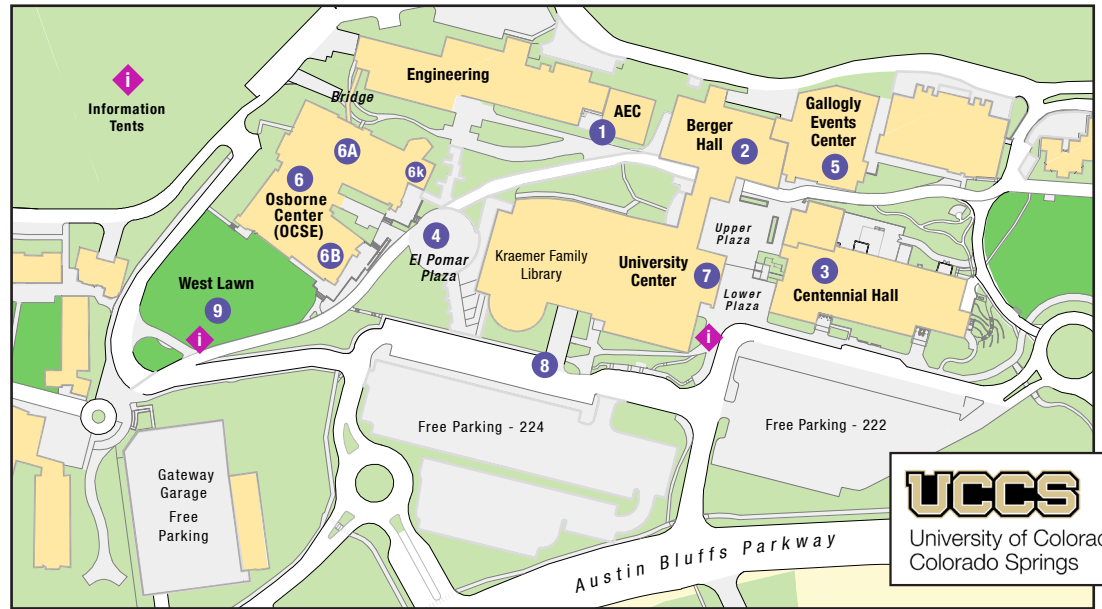
## 3 CENTENNIAL HALL - ROOM 203

### Black's Magic Productions

Master Magician Bruce Black presents a fun, educational magic show that demonstrates AND actually teaches a few magic tricks based on science principles.  
Show at 11:15 am. All Ages

### UCCS Chemistry & Biochemistry Dept.

Dr. Elise Naughton and her students will demonstrate the magic of chemistry with rainbow fire, flaming gummy bears, an electric pickle, a genie in a bottle and of course, Elephant's Toothpaste, all while spotlighting very special elements from the Periodic Table!  
Shows at 1:45pm & 3pm. All Ages



**UCCS**  
University of Colorado  
Colorado Springs

### Cool Science & US Air Force Academy

Always a fan favorite, experience the wonders of chemistry with Dr. Ron Furstenuau performing his signature magic show. "Potions" change colors, explode and even freeze right before your eyes!  
Shows at 10am & 12:30pm.  
All Ages

## 4 EL POMAR PLAZA

### Rocky Mountain Robotics

Meet and perhaps even drive ASD-20's First Robotics Competition robot.

### Colorado Springs Astronomical Society

Observe the sun with special solar telescopes and free viewers; also UV bead bracelets.

### Trailblazer Elementary School

Practice map reading and making skills on a scavenger hunt for flora and fauna.

### Mathnasium at Rockrimmon

Use math while experimenting to build a rocket with film canisters and Alka-Seltzer tablets.

### League of Women Voters of the Pikes Peak Region

Paint a rock and learn why it's important to vote.

### Southeastern Colorado Renewable Energy Society

Cook S'mores cooked in a solar oven and learn about renewable energy technologies.

### Pikes Peak Beekeepers Association

Observe live bees in a real beehive, and the beekeeping equipment used.

### Eagleview Middle School Robotics

Meet our Spike Prime Robot from the FIRST LEGO League Challenge Innovation project.

## 5 GALLOGLY EVENTS CENTER

### Lockheed Martin

May the Force be with you to power your rocket sled and experience virtual reality headsets.

### Boys & Girls Club - Pikes Peak Region

Build cool electrical circuits and construct giant Rigamajigs.

### Cougars Gone Wired

Play robot soccer with Vex IQ robots and play "catch" with a full-size FIRST robot.

### Missile Defense Agency

Design, build and launch your own inflatable ballistic missile, hoop glider or gyrocopter.

### Boy Scouts of America Pathway to the Rockies Council

Build a LEGO racer to test on our racetrack and learn how to leave no trace in the woods.

### UCCS Cybersecurity Programs Office

Learn about cybersecurity through games and VR (Virtual Reality)!

### Pikes Peak State College Engineering

Build a mouse trap car and a ping pong launcher to hit the target!

## 6 OSBORNE CENTER (OCSE)

**6A OCSE 2ND FLOOR - A-WING Academy for Advanced & Creative Learning** Build, launch and optimize your own straw rocket.

### Pikes Peak Regional Science and Engineering Fair

Learn how to make an awesome science fair presentation from winning students.

**Colorado Melanoma Foundation / The Sun Bus LLC** Check your skin health with a UV camera, learn about sun safety, and make a UV bracelet.

**Pikes Peak Library District** Create an optical illusion Penny Spinner, and even take a spin yourself.

### (OUTSIDE PATIO)

**Space Foundation Discovery Center** Hold smoke-filled, bouncing dry ice soap bubbles and learn about sublimation.

## ROOM A-210

### UCCS Computer Science Bioinformatics Lab

Learn how machine learning techniques are being used to decode complex biological data and genetic structures and functions, enhance our understanding of genetic diseases and pave the way for personalized medicine. Best for high school students and adults.  
Shows at 11am, Noon & 1pm.

## 6B OCSE 2ND FLOOR - B-WING ROOM B-211

**Zometool Inc.** Learn about space and infinite dimensions or just build incredibly beautiful models!

## ROOM B-213

**Nature and Wildlife Discovery Center** Meet some live birds of prey and explore skins and skulls.

## ROOM B-215

**US Air Force Academy Computer & Cyber Sciences Dept.** Crack codes, send secret messages, sing with a robot, and program computer animations and robots.

### ROOM B-216

#### Civil Air Patrol - Pikes Peak Composite Squadron

Learn how airplanes fly with Bournoulli Bags, hair dryers and fun demonstrations.

### ROOM B-217

#### Polly Holyoke (children's author)

Learn to echo-locate like a dolphin to navigate around sea "creatures".

### 6A OCSE 3RD FLOOR A-WING

**Henry Elementary - School Dist. 11** Program Ozobots and Sphero Indis using color codes; watch a 3D printer.

#### Pikes Peak Mycological Society

Check out what's going on in the soil under the cute little caps of mushrooms.

#### American Numismatic Association

Guess how much "money" is contained within various containers.

### ROOM A-303

#### UCCS Mechanical & Aerospace Engineering Dept.

Tour an engineering machine shop and make a penny catapult.

### ROOM A-321

**Emerge Aquaponics** See fish, plants and microorganisms working to create a sustainable food growing system.

### 6k ROOM A-327

#### Colorado Springs Rocket Society & Estes Rockets

Build your own real Estes model rocket with help from COSROCS model rocket scientists.

### 6k ROOM A-327 LOBBY

#### We're Cookin' Now! presented by Chefs' Kitchen

Fun culinary activities and demonstrations by real chefs

### 6B OCSE 3RD FLOOR B-WING

### ROOM B-310

#### UCCS Biology Dept.

Smash strawberries and extract DNA to learn about the genetic building blocks that make up all life. You can even try to extract DNA from your own cheek cells. Labs at 10am, 11am & Noon. All Ages

### ROOM B-314

#### UCCS Bug Club - Insectapalooza!

Meet live and preserved spiders, bugs and other critters and feed them.

### ROOM B-426

**UCCS Biology Dept.** Use microscopes to explore small wonders in the world of cells and microbes.

### 6A OCSE 4TH FLOOR A-WING

#### National Museum of World War II Aviation

Build and test fly your own foam plane to demonstrate the physics of flight.

#### Davidson Technologies

Make your own Star Wars light saber.

#### Challenger Colorado

Micro Explorations activities from the Interstellar Mapping and Acceleration Probe.

### ROOM A-402

#### UCCS Natural History Museum

See 800 specimens of mammal skins, skulls and skeletons and dissect owl pellets.

### 7 UNIVERSITY CENTER

#### KRAEMER FAMILY LIBRARY

Need a break from the excitement? The Kraemer Family Library provides multiple sensory-friendly spaces for families to use.

### UC 1ST FLOOR

#### El Paso County Nature Centers

Meet some of the tiny creatures that live in the Fountain Creek Watershed.

#### Girl Scouts of Colorado

Explore electromagnetism using balloons and static electricity.

#### Beth-El/Johnson College of Nursing and Health Sciences Clinical Simulation

Meet a robotic patient and solve a mysterious illness, then make simulated wounds.

#### Donor Alliance

Learn about organ and tissue donation by playing a life-sized Operation game!

### ROOM 122

**UC Health** Learn about the cardiovascular system and how your heart pumps blood through your body.

### UC 2ND FLOOR

#### Club for the Future

Send a postcard to space on Blue Origin's New Shepard rocket.

#### Exploration Summit

Explore the microscopic world with our digital microscope and create a DIY Music Box.

#### That Science Fairy

3 simple math activities teaching fractions for pre-K kids.

#### US Environmental Protection Agency

Play fun games to learn about protecting our environment.

#### USAF Biotechnology

Learn how bio-microorganisms can create more ecological cement for construction.

#### El Pomar Foundation's Penrose Heritage Museum

Use an ink dip pen and a typewriter to add to our ongoing story throughout the day.

#### UCCS Cognitive Development Lab

Learn why we think the way we think by playing a memory game.

#### Kratos Defense & Security Solutions

Learn about satellite communications on a fun scavenger hunt.

### UC 3RD FLOOR

#### Manitou Springs Robotics

See FIRST Robotics Competition and FIRST Tech Challenge robots, and even drive some.

### ROOM 302

#### US Air Force Academy Physics is Phun

Watch- and experience- the amazing power of physics with a variety of static electricity and magnetic fields demonstrations. Between shows you can try out some of the equipment yourself! Shows throughout the day. All Ages

### ROOM 303 A & B

#### Keysight Technologies

Build electrical circuits, "see" sound waves and an LED light show, and explore with hand-held microscopes.

### ROOM 307

**Cool Science** Build and test various bridge types, including one designed by Leonardo Da Vinci.

### 7 UC LOWER PLAZA

#### Inventa Academy

Learn hands-on how gears, transmissions and other real automotive components work

**Concrete Couch** Learn hands-on how gears, derailleurs, brakes and other bicycle components work.

#### Palmer High School Science & Cool Science

Make your own cup of ice cream with liquid nitrogen at - 320°F!

### 7 UC UPPER PLAZA

#### Pikes Peak Soap Box Derby

Let gravity provide the power and take a ride in a real Soap Box Derby car.

#### Cave of the Winds

Learn how some caves and rocks form and the critters of the cave ecosystem.

#### Colorado Parks and Wildlife

Meet live fish from Fountain Creek in our aquariums.

### 8 UC LOWER PLAZA PARKING

#### Colorado Springs Utilities

Determine the best sacrificial anode to protect metal pipes from rusting.

#### Colorado Springs Fire Dept.

CSFD fire fighters demonstrate their equipment. 10am-Noon & 1-3pm

### 9 WEST LAWN

**Cheyenne Mountain Zoo** Meet some of your favorite zoo animals. 10am-2pm.

#### US Army 1-41IN, Fort Carson

Soldiers demonstrate armored vehicles, mortar systems, and protective gear.

#### Civil Air Patrol - Colorado Springs Cadet Squadron

Build a paper rocket and launch it 300 feet with compressed air!

#### U.S. Air Force Academy, 94th Flying Training Squadron

Climb into a real USAF glider just like the ones Academy cadets use to soar.

**City of Colorado Springs - Archaeology** Learn about archeology and the early history of Colorado Springs and Garden of the Gods.

**American Institute of Aeronautics and Astronautics Rocky Mountain Section** Engineers from the AIAA will help you build and experiment launching foam rockets.

**Colorado Climbing Company & Go West Camps**

Learn how climbers fight gravity using physics and technology to scale our 30-foot tall portable climbing wall.

The Cool Science Festival continues thru Oct. 13th with many more cool events and fun for all ages!

Full Schedule Online:



[www.coolscience.org](http://www.coolscience.org)



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