SUMMER 2024

K-12

Summer Camps

High School Classes

STEM Research Experience

Teen Internships

Science Discovery

UNIVERSITY OF COLORADO BOULDER

ONLINE REGISTRATION OPENS JANUARY 10!

Discover, Create, Explore: THE ULTIMATE STEM ADVENTURE AWAITS

Calling all future scientists, engineers, and creatives! Get ready to embark on an explorative MRXUQH\ ZLWK &8 6FLHQFH 'LVF sensational summer camps and high school classes. Fill your summer with hands-on STEM experiences that are sure to ignite your passion for learning. At Science Discovery, we believe in the power of creativity, questions, and the joy of discovery.

Share this digital summer catalog with the K-12 science enthusiasts in your life and start planning your summer right away.

ONLINE REGISTRATION OPENS

Note: This catalog contains summer 2024 schedules and basic program descriptions. For complete details on Science Discovery policies (including cancellation, transfer, and medication administration policies), frequently asked questions, scholarship information and more, please visit:

CAMPS

for JUNIOR SCIENTISTS

June 3-7	'LJJLQ· 'LQRV 8S DQG $WRP	9am-4pm	$575
June 10-14	:KDW·V %XJJLQ· <RX 1HZWRQ 9am-4pm		$575
June 17-18	Nature Explorers (Note: This is a 2-day camp.)	9am-4pm	$235
June 20-21			

NEW! ADVENTURE TIME

July 15-19; 9am-12pm
July 29-August 2; 9am-12pm
$285
Location: Science Discovery

'R \RX NQRZ ZKDW WLPH LW LV" ,W·V $GYHQWXUH time! Grab your friends and sense of adventure because this is going to be one camp you wont want to miss! Each day we will embark on a new journey investiagting some of the worlds biggest phenomenons. Together we will take a VFLHQWLÀF DSSURDFK WR P\WKLFDO FUHDWXUHV magical worlds, other galaxies; and much more!

SCIENCE MAGIC

June 10-14; 9am-12pm
July 15-19; 1-4pm
$285
Location: Science Discovery

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June 10-14; 1-4pm
July 29-August 2; 1-4pm
$315
Location: Science Discovery

Join us to explore the fascinating world of robots with some of our favorite robotic friends, including Cubelets, Ozobots, and Dot and Dash. Through a combination of “unplugged,” coding, DQG FUDIW DFWLYLWLHV ZH·OO SOD\ ZLWK FRGH DQG create robots that make lights, sounds, drawings, and movements. Using Cubelets, ZH·OO EXLOG WHVW DQG UHEXLOG URERWV WKDW VHQVH ¶WKLQN · DQG DFW LQ GLIIHUHQW ZD\V :H·OO GUDZ colorful mazes for Ozobots to navigate, and learn some coding basics as we program Dash WR UDFH ERZO DQG DYRLG REVWDFOHV :H·OO HYHQ design our own robot to help the Earth and use recycled materials to build it!

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June 3-7; 1-4pm
July 29-August 2; 1-4pm
$315
Location: Science Discovery

/HDUQ WR FRGH ZLWK /(*2·V SURJUDPPDEOH URERW 6SLNH 3ULPH :H·OO GHYHORS engineering and programming skills as we DVVHPEOH FRGH DQG WHVW /(*2 robots to complete a series of different tasks. 7KLV \HDU ZH·OO XVH WKH)LUVW Challenge Masterpiece-themed mats from 2023 as our base to complete challenges and PLVVLRQV :H·OO GHVLJQ DQG EXLOG different scenarios and learn how to control motors and use sensors. After mastering the EDVLFV ZH·OO ZRUN WR FRPSOHWH PRUH DGYDQFHG GHVLJQ FKDOOHQJHV :H·OO OHDUQ DERXW DQG DSSO\ physical science and math principles to design and maneuver our robots. The best part: no prior programming or robotics experience is required!

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June 10-14; 9am-12pm
July 15-19; 9am-12pm
$315
Location: Science Discovery

Welcome to micro:bit! This little board can do it all, from driving motors and sensing the world around it to executing and interacting with the programs you can PDNH XVLQJ 0DNH&RGH RU -DYD DQG 3\WKRQ IRU WKRVH ZKR ZDQW WR WDNH LW D VWHS further. In this class, we will learn the basics of how to write simple programs with easy DQG IRUJLYDEOH GUDJ DQG GURS SURJUDPPLQJ ,QWURGXFWRU\ H[SHULHQFH UHTXLUHG : take those skills and use our building chops to take our inventions from the computer screen into the real world. Make your own invention that solves problems for you and your community. Want a machine that waters your plants for you? A custom game? A device that tells you the temperature outside? These and many more inventions are possible starting with the micro:bit – come learn with us!

HIGH SCHOOL CLASSES

AEROSPACE

June 10-14; 9:30am-3pm
June 24-28; 9:30am-3pm
July 8-12; 9:30am-3pm
July 22-26; 9:30am-3pm

$625

Location: Fleming Building

Sixteen CU Boulder astronauts have flown on forty space shuttle missions. Learn from some of the leaders in aerospace technologies in learning about what it takes to be an aerospace engineer. In this course we'll meet scientists from the Laboratory for Atmospheric and Space Physics (LASP), learn about astrobiology and plan our mission to Mars. We'll get a chance to see one of only a few university-based Mission Operations Centers where LASP undergraduate and graduate students perform mission operations for NASA satellites totaling more than [illegible] billion in value. Additionally, we'll get a chance to work on gliders, airfoils, rocket engines, and testing composites for aircraft wings. Finally, we'll learn about alternative applications of aerospace, such as wind turbines and parachutes.

BIOTECHNOLOGY

Dates to be determined; 9:30am-3pm
$625

Location: JSCBB

This class is perfect for students who are excited about biological sciences and want to learn about meaningful career paths outside of clinical medical sciences. Over the course of our week, students will be introduced to various areas of biotechnology, listen to guest speakers, explore various career options, go on lab tours, and conduct hands-on experiments. We will explore the history of biotechnology and how it is used today in medicine, agriculture, industry, and renewable energy. Students in this course can expect to learn about lab skills, the scientific process, and how to read scientific papers. Students will have hands-on practice with electrophoresis and bacterial transformation and discuss cutting-edge areas of research, including biofuels and synthetic biology as they learn about how these impact the future of biotechnology. This class offers a great opportunity to learn about cutting-edge research going on in and around CU Boulder!

FORENSICS

Dates to be determined; 9:30am-3pm
$625

Location: JSCBB

ADDITIONAL HIGH SCHOOL PROGRAMS

STEM RESEARCH EXPERIENCE

JUNE 7 - JULY 26, 2024

In this 6-week program, CU Boulder and CU Anschutz faculty and graduate students act as mentors to highly motivated high school students interested in gaining real world laboratory experience.

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- How to become a research scientist
- The process by which research is conducted
- How to probe data for answers to important questions

Visit the Science Discovery website for application requirements and timeline.

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JUNE 17 - JULY 18, 2024

Build a Better Book is pleased to offer high school students the opportunity to participate in an immersive engineering and design internship focused on using Maker technologies to create accessible materials for blind or visually impaired clients.

Through the internship, interns learn about and complete projects using:

- Universal design principles, empathy-driven design and Maker technologies
- Accessibility tools and designing for disabilities
- Tactile and multi-modal learning styles
- Their newfound knowledge about blindness, vision impairments, and other disabilities

Visit the Science Discovery website for application requirements and timeline.

CU ANSCHUTZ MEDICAL CAMPUS GRADES 7-12

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Grades 7-9
June 17-21; 9am-4pm
$625
Location: CU Anschutz

We all depend on the letters D-N-A for life, but what is really spelled out by our genetic code? How do cells use DNA and why do scientists study it? During this camp, we will inspect the structure of DNA, investigate its function, and examine variations in its code. Activities will include fun hands-on experiments and interactions with Anschutz Medical Campus scientists. No spelling tests! Join us for an exciting exploration of a molecule essential for life!

ANIMAL SCIENCE ADVENTURES + POISONS TO POTIONS

Grades 7-9
June 10-14; 9am-4pm
$625
Location: CU Anschutz

Animal Science Adventures explores topics such as animal behavior, care of lab animals, and hands on practice of techniques used by scientists and animal care technicians. We will conduct experiments with pill bugs, learn about careers involving laboratory animals, and tour the Anschutz Medical Campus animal facility.
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