

Explore USI Summer Series

for High School Students



Is your high schooler interested in STEM but short on opportunities to explore it? We've created this summer series with your busy family in mind! The Pott College of Science, Engineering, and Education at the University of Southern Indiana invites your student (grades 9-12) to the Explore USI Summer Series—two-day mini-camps in June and July 2025. These engaging sessions introduce collegiate-level STEM coursework, showcase majors in our college, connect students with USI faculty and industry experts for mentorship, and build confidence for the college transition. Registration opens April 1, 2025, with only 150 spots available, filled first-come, first-served upon payment. Reserve your student's spot in one or more camps to help them make informed choices about their college major and career path!

Move, Measure, Master: Exercise Science Unleashed (ESTEM001)

Ready to crack the code on how your body works, how athletes crush it, and how science powers recovery? Join exercise science guru Dr. Cody Strom for an epic 2-day mini-camp at USI's Human Performance Laboratory that will blow your mind! You'll get your hands on insane tech like metabolic carts, BodPod, DEXA scanner, hydrostatic weighing tank, wireless EMGs, Elite Form Squat Racks, Force Plates, spirometers, Biodex machine, and Alter-G Anti-Gravity Treadmills. Test your own metabolism, measure your body fat, analyze your moves, and even rehab like a pro—all while digging into the science behind it. You'll have lunch with pros—like strength coaches and USI grads—spilling the tea on careers in personal training, physical therapy, and beyond. Tour USI's beautiful Screaming Eagles Complex, peek at college life, and see if exercise science is your ticket to the big leagues. Bring your A-game, meet new crew, and level up your future—this is your shot to shine!



Registration Link

<https://tinyurl.com/exploreUSI>

Date: June 4 - 5, 2025

Time: 9 a.m. – 3 p.m.

Location: Screaming Eagles Complex, University of Southern Indiana

Leader: Dr. Cody Strom

Registration Fee: \$75 (includes lunch and t-shirt)

Capacity: 20 students

Course Number: ESTEM001



Buzz into Action: A Bee Campus Adventure (ESTEM002)

Step into the vibrant world of pollinators at USI's Bee Campus Adventure, a rewarding 2-day mini-camp that blends hands-on science with real-world impact! Led by biologist Dr. Edie Hardcastle, you'll plant pollinator gardens, peek inside buzzing beehives, and craft a bubble rock wildlife oasis—all while unraveling the secrets of conservation. Explore cutting-edge facilities, hear from guest experts about buzzing careers in biology, and get a sneak peek at college life. Pollinators aren't just tiny heroes—they're vital to our food supply and planet's health, making your role in protecting them a game-changer for global challenges. You'll master practical skills in biology and environmental science, setting yourself up to shine in college and beyond. Plus, you'll team up with top scientists and conservationists, soaking in their expertise as you hike nature trails, connect with new friends, and leave your mark on the planet. Don't miss this chance to dive in and launch your science journey with a buzz!

Date: June 11 -12, 2025

Time: 9 a.m. – 3 p.m.

Location: Science Center, University of Southern Indiana

Leader: Dr. Edith Hardcastle

Registration Fee: \$75 (includes lunch and t-shirt)

Capacity: 20 students

Course Number: ESTEM002



Registration Link

<https://tinyurl.com/exploreUSI>



Power Up with Solar: A Hands-On Energy Adventure (ESTEM003)

Ready to tap into the sun's limitless energy? Join solar expert Dr. Brandon Field for an electrifying 2-day mini-camp where you'll build and race solar cars, test solar cell efficiency under quirky conditions—think varying angles, light sources, and coverings—and whip up gooey solar s'mores with thermal power. At USI's Applied Engineering Center, you'll dive into solar PV and thermal tech, assembling car kits and heating water with a parabolic reflector, all while wielding cool tools like diffraction gratings, solar thermal trainers, and Vernier thermocouple data loggers to see solar energy in action. Hear from pros from Morton Solar about real-world installations, and discover how mastering energy conservation can ignite careers in engineering or sustainability. Solar isn't just fun—it's your ticket to joining the clean energy revolution, fighting climate change, and lighting up the planet's future. Sign up today and charge toward an epic adventure!

Date: June 16 - 17, 2025

Time: 9 a.m. – 3 p.m.

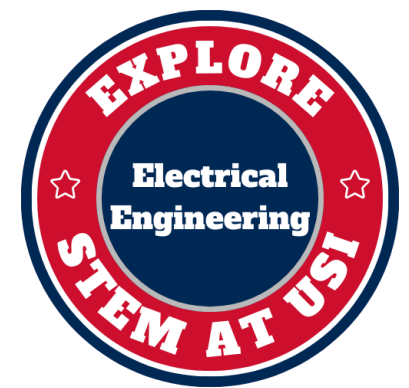
Location: Applied Engineering Center, University of Southern Indiana

Leader: Dr. Brandon Field

Registration Fee: \$75 (includes lunch and t-shirt)

Capacity: 20 students

Course Number: ESTEM003



Registration Link

<https://tinyurl.com/exploreUSI>



Microscopic Marvels: A Microbiology Adventure (ESTEM004)

Ever dreamed of stepping into a lab and wielding the tools of a biologist? Join Dr. Henri Maurice for a fun 2-day mini-camp where you'll master micropipetting, transform bacteria into glowing wonders, and separate proteins with electrophoresis. Beyond the thrill of these experiments, you'll uncover how microbiology fuels incredible careers—from lab research to health innovations—while gaining skills that form the backbone of modern biology. These techniques empower scientists to tackle real-world challenges like curing diseases, boosting food production, and safeguarding the environment, giving you a head start on cutting-edge methods that could redefine science's future. Explore USI's state-of-the-art labs and greenhouses, hear from pros and current USI students about their career paths, and peek into life as a freshman biology major. Along the way, you'll pick up tips to ace your first year of college, forge new friendships, and discover if microbiology is your calling. Don't miss this chance to unlock life's tiniest secrets and launch your journey into science!

Date: June 17 - 18, 2025

Time: 9 a.m. – 3 p.m.

Location: Science Center, University of Southern Indiana

Leader: Dr. Henri Maurice

Registration Fee: \$75 (includes lunch and t-shirt)

Capacity: 20 students

Course Number: ESTEM004



Registration Link

<https://tinyurl.com/exploreUSI>



Build, Design, and Discover: CAD & 3D Printing (ESTEM005)

Ready to dive into the world of engineering and manufacturing? Join CAD expert Dave Ellert for a hands-on 2-day mini-camp where you'll design parts, assemble 3D models using SolidWorks, and bring your creations to life with 3D printing! Mastering CAD isn't just about creating cool designs—it's a must-have skill that opens doors to high-demand careers in engineering, manufacturing, and beyond, where innovation meets real-world impact. Plus, you'll be part of an exclusive group of high schoolers who can confidently say they know CAD—a skill so rare that only a small percentage of your peers have it, giving you a standout edge in college applications and future job interviews! Perfect for high schoolers curious about engineering, this camp offers a sneak peek into exciting careers, insider tips from USI Engineering students, and a tour of the Applied Engineering Center's cutting-edge labs. Don't miss your chance to create, connect, and explore your future in tech!

Date: June 11 - 12, 2025 (*date changed*)

Time: 9 a.m. – 3 p.m.

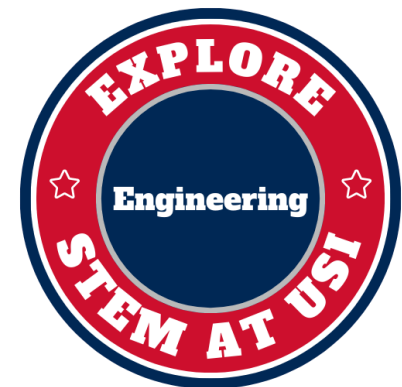
Location: Applied Engineering Center, University of Southern Indiana

Leader: Mr. Dave Ellert

Registration Fee: \$75 (includes lunch and t-shirt)

Capacity: 20 students

Course Number: ESTEM005



Registration Link

<https://tinyurl.com/exploreUSI>



Number Ninjas: Solve Big Problems and Tiny Mysteries (ESTEM006)

Have you ever pondered whether King Kong could really exist or how math stopped a deadly pandemic? Join math experts Dr. Misty Ostergaard and Dr. Mark Creager for this engaging 2-day mini-camp at USI, where you'll plunge into the world of math in a whole new way! Armed with slick tools like Geogebra and CODAP, you'll explore geometry, statistics, and beyond, tackling intriguing challenges—like determining if a jury panel is fair, cracking riddles, or even stopping a simulated pandemic—all powered by math's magic. Far more than just equations, math becomes your key to solving real problems and decoding the world around you. You'll hear from math pros and USI grads about inspiring careers awaiting you, plus get a firsthand taste of college life. Team up in small groups, forge new friendships, and roam USI's campus—from scenic trail hikes to peeks inside our math resource rooms. Don't miss this chance to uncover some fun applications of math and maybe even chart your future path!

Date: June 25 - 26, 2025

Time: 9 a.m. – 3 p.m.

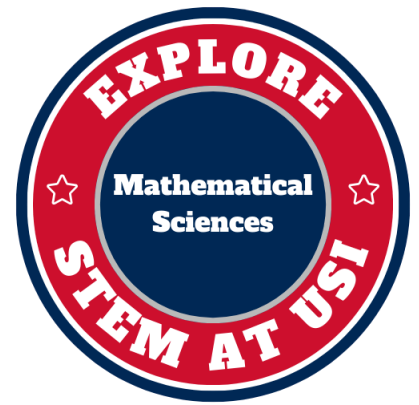
Location: Science Center, University of Southern Indiana

Leaders: Dr. Misty Ostergaard and Dr. Mark Creager

Registration Fee: \$75 (includes lunch and t-shirt)

Capacity: 20 students

Course Number: ESTEM006



Registration Link

<https://tinyurl.com/exploreUSI>



Go with the Flow: Exploring Water's Vital Journey (ESTEM007)

Ready to uncover the incredible journey of water through our planet? Join environmental science experts Dr. Paul K. Doss and Dr. Tony Maria for an engaging 2-day mini-camp that dives into the water cycle's essential role in ecosystems and human survival. You'll explore how water serves as the primary “vehicle” for transporting matter and energy—carrying life-giving nutrients and, at times, harmful contaminants—across Earth's surface and subsurface. Hike wooded trails to witness water's flow through the landscape, then head to the lab to investigate key reservoirs like soil moisture, surface water, and groundwater using cutting-edge tools such as soil moisture instruments, water quality probes, and active groundwater wells—the same tech powering national environmental monitoring systems. Along the way, you'll discover careers like Earth and Environmental Scientist, geologist, or water resource manager, while building college-ready skills in data collection and lab techniques to tackle pressing issues like climate change and water scarcity. Sign up now to explore, experiment, and kickstart your science future with a splash!

Date: July 15 - 16, 2025

Time: 9 a.m. – 3 p.m.

Location: Science Center, University of Southern Indiana

Leader: Dr. Paul Doss and Dr. Tony Maria

Registration Fee: \$75 (includes lunch and t-shirt)

Capacity: 10 students

Course Number: ESTEM007



Registration Link

<https://tinyurl.com/exploreUSI>



Unravel the Hidden Kingdom: A Fungi and Mushroom Quest (ESTEM008)

Step into the wild, weird, and wondrous world of fungi with Dr. Brian Bohrer at this captivating 2-day mini-camp at USI! Whether you've dreamed of growing your own mushrooms or hunting wild ones in the woods, this is your chance to make it happen. You'll cultivate tasty oyster mushrooms, forage along USI's scenic wooded trails, and discover how fungi quietly shape our lives—from breakthroughs in medicine and biotech to innovations in food and sustainability. Guided by pros like Mary and Roger Winstead of Beautiful Edibles, you'll explore careers such as ecology and microbiology and get a firsthand look at college life from USI's expert faculty. Perfect for fungi fanatics or curious newcomers alike, this camp takes you through cutting-edge labs and greenhouses, sparks new friendships, and might just ignite a lifelong passion for mushrooms. Don't miss this chance to dive deep into this hidden kingdom and uncover its secrets!

Date: July 21 - 22, 2025

Time: 9 a.m. – 3 p.m.

Location: Science Center, University of Southern Indiana

Leader: Dr. Brian Bohrer

Registration Fee: \$75 (includes lunch and t-shirt)

Capacity: 20 students

Course Number: ESTEM008



Registration Link

<https://tinyurl.com/exploreUSI>

