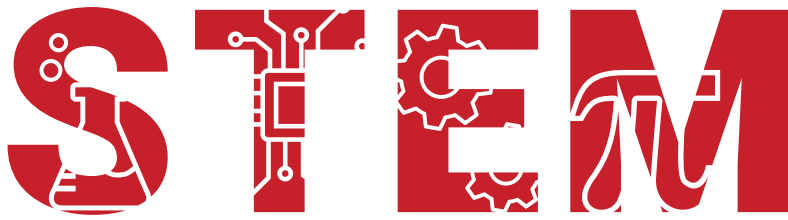


Capitol Technology University's



Challenge

Join us for a fun filled day of STEM Challenges. Challenges are available in morning and afternoon sessions for students from middle school through community college age. Join us for the morning, afternoon or both. **Win prizes!**
Lunch will be provided

OCTOBER 15TH, 2022

Check in starts at 9:00am

MORNING SESSIONS

Fun with Fixtures for Database Applications

9:30AM - 12:30PM

Students will build a database that will keep an inventory of items related to fun topics. For example, a CD collection, toys...etc. Have the participants pick a topic. The participants will work in clusters with assigned student helpers to guide them through the implementation. This will be competitive in terms of turnover and delivery of a working database with a presentation on how it performs. The participants will present their work. The scoring will be based on time, quality, and clarity. **Space limited to 20 students.**

All about Drones (flying lessons and competitive racing)

9:30AM - 12:30PM

Students will be given lessons on how to safely fly a drone. The session will then transition into competitive drone racing for prizes. **Space limited to 20 students.**

Cyber Capture the Flag (CTF)

9:30AM - 12:30PM

Students will participate in a cutting edge CTF with challenges of increasing difficulty. The event was designed and will be led by our own Cyber Competition Team Signal-9. **Students can participate in person or online.**

ALPHA Observatory

9:30AM - 11:30AM

Students will tour the observatory then engage in activities such as observe the sun and visible planets. Students learn how to analyze captured observatory data to identify meteors and identify constellations. **Space limited to 24 students.**

Rocketry (Construct and Launch)

10:00AM - 12:00PM AND 1:00PM - 3:30PM

Students will be challenged to construct their own rocket and launch it high into the sky. **Space limited to 20 students.** *Note: The build portion of this challenge is 10-12 and the launch will be 1-3.*

Lunch

12:00PM - 1:00PM



AFTERNOON SESSIONS

Cyber Capture the Flag (CTF)

1:30AM - 3:30PM

Students will participate in a cutting edge CTF with challenges of increasing difficulty. The event was designed and will be led by our own Cyber Competition Team Signal-9. **Students can participate in person or online.**

Rocketry (Construct and Launch)

10:00AM - 12:00PM ^{AND} 1:00PM - 3:30PM

Students will be challenged to construct their own rocket and lately launch it high into the sky. **Space limited to 20 students.** *Note: The build portion of this challenge is 10-12 and the launch will be 1-3. This is an outdoor event and would be rescheduled if inclement weather. Space limited to 20 students.*

Space Flight Operations Training Center (SFOFTC) (Mission Control)

1:00PM - 4:00PM

Imagine working in mission control launching and controlling a real satellite mission. You will be challenged to ensure that the mission is a success, and the data is downloaded. **Space limited to 20 students.**

Construction Challenge (Design and Build)

1:00PM - 4:00PM

Students will be challenged to design and build a free-standing structure from the materials provided with a clock ticking. **Space limited to 20 students.**

REGISTER TODAY!



As Washington D.C.'s premier private, non-profit, STEM University, Capitol Technology University produces graduates that are highly sought-after by America's most technologically advanced government agencies and their private sector partners.

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