



SPACE GRAND CHALLENGE



CAL POLY
California Cybersecurity
Institute

FAQ

2022

FAQ

What is the Space Grand Challenge (SGC)?

The Space Grand Challenge (SGC) is a free, virtual, esports competition that develops middle and high school students' space, cybersecurity and tech skills in a fun and compelling way. This competition provides teams of 3 to 6 students (plus a coach) the opportunity to work together and solve a simulated, gamified cybersecurity breach of a satellite. Brief overview video available [here](#).

Are there any costs to participate?

No, thanks to [SGC Sponsors](#), it is a free event!

Do you need prior experience in technology, coding and/or cybersecurity?

No, there is both a beginner and advanced level. Beginners learn the fundamentals, while more experienced students apply advanced skills.

When is the SGC?

October 7-9, 2022. SGC begins with a brief opening ceremony the afternoon of October 7th at 5:00pm PST, followed by a full, seven-hour day of competition on October 8th beginning at 9:00am PST, and a brief closing ceremony on October 9th at 9:00am PST announcing the winners. Agenda will be posted [here](#).

Who can participate?

It is open to middle and high school students (grades 6-12) from around the globe. No prior experience is required and both beginner and advanced levels are offered.

What skillsets will students gain from participating?

Students gain experience in Python, Java, JavaScript, C, C++, SQL, Stack, Queue, Hash table, Heap, Design Patterns, Code injection, Block Cipher, Public Cipher, Caesar, Rot, Base, DoS, Wireless Security: WEP, WPA, WPA 2, GSM, 3G, LTE, Malware, Wireshark, Autopsy & Forensics, Orbital Mechanics, Ethics & Cybersecurity, Esports & Leadership, NICE Framework, Satellite Communications, Software Defined Radios, Deep Space Networks, and VPN. Quite the repertoire for learning and skills enhancement!

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What will students do during SGC?

The game features gamification and Esports elements, and participants collect evidence from virtual reality simulated rooms, then analyze the data to solve who was responsible for perpetrating the cybercrime.

How can participants prepare for the competition?

All training materials are linked [here](#). Students and coaches simply need to enroll with an email and password.

How much time is required to prepare?

Based on the training materials, the estimated time to prepare is about 25 hours. If you have less time available, you can focus on the following training materials: Mission 1 - All parts except the home router security and practice image download 3; Mission 2 - All you can do; Mission 3 - First box, Essential Training.

How do I register?

Coaches can register their student teams [here](#). Note that student and their parent/guardian contact information is required.

By when do I need to register?

Registration will remain open until the event begins on Oct 7.

Can I enter as a single-person team?

No. The minimum requirement for a student team is 3 and the maximum is 6.

Can a coach lead more than one team?

Yes!

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How do I get more information?

More information is available [here](#) and a recently recorded information session is available [here](#). You can also email cci@calpoly.edu or contact Danielle Borelli at 805-756-1341.

How can I stay up to date?

[Connect on social media](#) via Cal Poly California Cybersecurity Institute's (CCI) Space Grand Challenge for the competition Clue Campaign, bonus challenges, and informational posts.

Why should I participate in the Space Grand Challenge?

This unique opportunity is made possible by sponsors and it's rare for students and educators to be able to participate in a simulation informed by experts at the highest levels of the space, tech and cyberspace industries and have fun while doing it!

If I'm not able to participate this year, can I watch the competition to learn more?

You can tune in to watch a live broadcast of the competition for free on the CCI Twitch [here](#).

Is support available during the competition?

Yes, technical support will be available. Our Tech Support Team will be online during the competition to help answer questions via [Discord](#).