

The Third Annual ASU Cyber Security Challenge 2016

What is ASU Cyber Security Challenge?

ASU Cyber Security Challenge, co-organized by ASU New College and Terra Verde, is one of the exciting events happening at ASU West Campus Open Door Event on Saturday, February 6, 2016. This event brings talented minds from middle/high schools and colleges in Arizona to solve challenging, real-world problems that face today's cyber security professionals (cyber cops), digital forensic scientists, and network/security/system engineers.

What problems will we solve during the challenge competition?

The challenge problems include i) performing digital forensic analytics for detecting and analyzing cyber-attacks, ii) identifying and patching a series of cross-layer vulnerabilities in the networking devices (routers, switches, firewalls, etc) or end systems (Windows, Linux, etc), iii) analyzing the structure, content, behaviors and potential damage of mysterious executables and virus/worm packets, and iv) developing strategies for protecting assets in enterprise networks.

What skill sets do I need for participating in the challenge?

Problem-solving skill, TCP/IP, and programming. Knowledge with intrusion detection, firewalls, vulnerability analysis, and packet analysis is a plus.

Am I eligible to participate in the challenge?

All students, who are currently enrolling in middle/high schools, community colleges, or universities, are welcome and encouraged to register and participate.

Where do I register for the challenge?

<http://tinyurl.com/ghcchqb>

or

<https://docs.google.com/a/asu.edu/forms/d/1psXUmmoMCR1xaHOyTcCzUYmc1HdCtvht729O9ruADkM/viewform>

Competition Rules

- 1) All participants must follow ASU ACD 125 policy on Computer, Internet, and Electronic Communications:
<http://www.asu.edu/aad/manuals/policyarchives/ACD/Nov2001/acd125.html>
- 2) Each team can have up to three members.
- 3) The problems will be released at the beginning of the event.
- 4) Each team can solve all or part of the competition problems within the duration of the event.
- 5) The team members are not allowed to discuss the problems with people who are not in their team.
- 6) All team members are expected to bring their own laptops for connecting to the emulated enterprise network.
- 7) The team is allowed to download any open-source software packages onto their laptops or servers during the competition.
- 8) Each team will be graded based on the number of problems the team members have solved. The team with the highest score will be the winning team of the competition.

Hardware and Software support: A simple enterprise network environment will be established at the challenge. The emulated network will be disconnected from the Internet. The network will include network routers, firewall, servers, or virtual machines. The host operating systems include Linux or Windows. The services or applications available running the hosts will include Web servers, SSH sever, FTP server, firewalls (iptables), SNORT, Wireshark, TCPDump, p0f, etc.

Wireless Networks: A wireless network will be provided at the challenge for connecting to the simulated network environment.

Personal Laptops: All team members are expected to bring their own laptops for connecting to the network for solving the challenges. **No laptops will be provided during the competition.**

Awards: Each student will receive a certificate for participating in the challenge. The top teams will receive awards.

Event Location: SANDS 303, ASU West Campus, 4701 W. Thunderbird Road, Glendale, AZ, 85306

<http://www.asu.edu/map/interactive/?campus=west>

http://asu.edu/map/pdf/asu_map_west_current.pdf

Dates and Times

Team registration deadline: 11:59AM Friday, February 5, 2016.

Competition: 1PM - 4PM February 6, Demonstration and Judging: 4 – 4:30PM, Award Ceremony: 4:30PM – 5PM.

Contact: cybersecuritychallenge@asu.edu