

Cybersecurity Pathway to Success

for the South Central Coast Region



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7th Grade Topics to Consider:

1. Introduction to Tech: (ICT)
2. Programming Concepts (Scratch, Alice, etc.)
3. Hour of Code
4. Google Santa Tracker
5. Create a wheel class: exposing students to industry sectors:
6. i.e.: ICT in Manufacturing, Business and Health and Agriculture
7. Digital Citizenship

*Summer Camps Awareness with interest in computers

*Virtual Field trips/Career Exploration

8th Grade Topics to Consider:

1. Digital Footprint: Social Engineer/Ethics/Cyber Citizenship
2. Google Chromebook Curriculum - other prepackaged curriculum (age appropriate)
3. Explore CS - start simple at learning computers. Basics Parts, Hardware, etc.
4. Simple Software and Hardware Tools
5. COMPTIA IT Fundamentals
6. Educate students about workplace policies, background tests, drug tests
7. Digital Citizenship

*CyberPatriot/Capture the Flag (CTF)

*Scavenger Hunt (event) Red/Blue Team

*Field Trips and Guest Speakers (Manufactures, Hospitals, Server Rooms)

*CompTIA IT Fundamentals

9th Grade Topics to Consider:

1. Cybersecurity "Hacker experience" Activity and difference between white hat, black hat and grey hat
2. Raspberry Pi (Linux, Robotics, Python Network) Paragraph narrative based on learning outcomes
3. CompTIA IT Fundamentals
4. Start Cisco Cyber Security Path (CCNA 1, II) or CompTIA Cyber Security Path
5. "Gaming" - E-sports: example UCI - NASEF (e- sports) - (STEM)
6. General course - Cybersecurity (yearlong)
7. Professional skills: customer service, workplace etiquette
8. Educate students about workplace policies, background tests, drug tests
9. Simple Software and Hardware Tools
10. Cloud Access - Practice Labs/Virtual Labs
11. Digital Citizenship

*Sit for CompTIA IT Fundamentals Certifications

*Sit for ICMD Certification

*Sit for A+ Certification

*Cyber Competitions, recognitions, CyberPatriots.

10th Grade Topics to Consider:

1. Business Information Worker Applications (MS/Office)
2. CCNA 111, IV
3. Programming/Database
4. Cloud
5. Linux Lite to support Raspberry Pi and Python
6. Basic Electronics/Soldering
7. Secure coding
8. Opportunity to Explore ICT interests
9. Raspberry Pi Hardware
10. Research ICT skills - how to learn on your own - learning new skills
11. CompTIA+ Certification Course
12. Educate students about workplace policies, background tests, drug tests
13. Professional skills: customer service, workplace etiquette
14. Cloud Access - Practice Labs/Virtual Labs
15. Digital Citizenship

*Job Shadow

*Sit for Microsoft Office Specialist (MOS) Certificate

*Sit for CCNA Certification

*Sit for CompTIA A+ Exam

*Cybersecurity Clubs - extracurricular interests

11th Grade Topics to Consider:

1. Virtual Machines
2. Internet of Things (IOT)
3. Educate students about workplace policies, background tests, drug tests. (Scared-Straight)
4. IT-Business ie: project management. Business Information Worker
5. CompTIA Network+
6. Professional skills: customer service, workplace etiquette
7. Cloud Access - Practice Labs/Virtual Labs
8. Cisco Cyber Ops
9. Advanced Robotics/Drone Tech
10. Digital Citizenship

*Community Based Learning, Internship, Pre-Apprenticeships, Job Shadow

*Sit for CompTIA Network+ Certification courses

*Evidence of interest in Cybersecurity outside of required classes (reference on resume)

12th Grade Topics to Consider:

1. Blockchain
2. Artificial Intelligence (AI)
3. Deep & Dark Web, Nessus, Zen Map
4. Black Hat/White Hat/Grey Hat
5. CompTIA Network+
6. CompTIA Security+
7. Cisco Cyber Ops
8. Cloud Access - Practice Labs/Virtual Labs
9. Educate students about workplace policies, background tests, drug tests
10. Digital Citizenship

*Sit for Cyber Ops Certification

*Sit for CompTIA Network+

*Sit for CompTIA Security+

*Ready for Pre-Apprenticeship and Apprenticeship

Community College Yr 1 and Yr 2 Topics to Consider:

1. Linux
2. CompTIA CYSA+
3. CompTIA Network+
4. CompTIA Security+
5. Certified Ethical Hacker - EC Council
6. Cisco CCNA Security
7. Cisco IOT
8. Dev Ops
9. Project Management
10. Apprenticeships
11. Forensics
12. SDLifecycle - SDLC
13. Secure Coding
14. Advanced Robotics/Drone Tech
15. FAA Remote pilot exam
16. Digital Citizenship

*Sit for CompTIA CSYA+

*Sit for CompTIA Network+

*Sit for CompTIA Security+

*Sit for Certified Ethical Hacker - EC Council

*Sit for Cisco CCNA Security

*Sit for Cisco IOT

*Sit for Dev Ops?

*Cybersecurity Associations and clubs

*Apprenticeships

*Sit for FAA Remote Pilot

(Lsit is not inclusive and requires yearly review to remain current and relevant)

*(*Work based Learning)*



California
Community
Colleges



SCCRC ICT Team 2019