#Online Learning

Step 1, for everyone

Beginner

- Khan Academy Cybersecurity (less than 1 hr): https://www.khanacademy.org/partner-content/nova/cybersecurity
- Cisco NetAcad https://www.cisco.com/c/m/en_sg/partners/cisco-networking-academy/index.html
    - 4 courses available – 10-20 hours each (a full semester) but receive a certificate afterwards that looks great on a resume and a topic for discussion in interviews. You can do 1 course or all 4.
        - Intro to Cybersecurity
        - Intro to Internet of Things
        - Entrepreneurship
        - Linux
    - En Español: http://csrinfo.cisconetspace.com/Landing-pages_Girls-Power-Tech-in-Spanish.html (para niños y niñas, ignora las fotos)

Intermediate

- Khan Academy Internet (2 hrs): https://www.khanacademy.org/computing/computer-science/internet-intro
- Cybrary Courses: https://www.cybrary.it/

#More About Cybersecurity Careers

Step 2, for everyone

Blog: https://tisiphone.net/2015/10/12/starting-an-infosec-career-the-megamix-chapters-1-3/
Blog: https://danielmiessler.com/blog/build-successful-infosec-career/
Govt: https://niccs.us-cert.gov/workforce-development/cyber-security-workforce-framework

#Next Summer

For 10th and 11th graders

Free Camps	https://www.gen-cyber.com	(Look for student camps)
Paid Camps	https://www.uscyberpatriot.org	(Look for AFA Cyber camps)
Online program	https://www.cyber-fasttrack.org/	(Requires sign up later)

#College & University Degrees

For 11th and 12th graders

Some **technical** degrees or course pathways that will jump start you in a cybersecurity career are:

- information technology
- management information systems
- computer science
- electrical engineering
- computer engineering
- network administration
- information assurance

Texas 2-year programs

Austin Community College
http://sites.austincc.edu/cs/computer-information-technology/cybersecurity/
San Antonio College
https://www.alamo.edu/sac/academics/program-index/science-and-technology/information-security/

Texas 4-year programs

UT Austin: https://www.cs.utexas.edu/concentrations/cybersecurity
UT San Antonio: http://www.utsa.edu/spotlights/cybersecurity/
University of Houston: http://www.uh.edu/tech/cisre/education/undergraduate/
Texas A&M: https://cybersecurity.tamu.edu/education/undergraduate/
Texas A&M San Antonio: http://www.tamusa.edu/citcs/

Scholarships

ISC^2: https://www.iamcybersafe.org/scholarships/undergraduate-scholarships/
Minorities in Cybersecurity: https://www.icmcp.org/educational-scholarships
General (not cybersecurity focus): https://www.edsmart.org/scholarship/

Scholarship for Service (U.S. Citizen or Permanent Resident only)

https://www.sfs.opm.gov/ContactsPI.aspx -- contact schools to find out more

- UT: https://www.cs.utexas.edu/undergraduate/academics/scholarship-service
- UTEP: https://www.utep.edu/cs/opportunities/sfs_program.html
- TAMU: https://cybersecurity.tamu.edu/students-corner/available-scholarships/sfs-scholarship/
- San Antonio College: https://www.alamo.edu/sac/about-sac/grants/cyber-service-scholarship-css/

#Certifications

If you're ALL IN!

These cost money just to take (and you don't get your money back regardless if you pass or fail) BUT can also really help you get a job. Sometimes college classes will work with the companies to include the test cost as part of the course fee. If you are able to take the test, DO IT.

Don't give companies ANY reason to pay you less than top $$!

CompTIA Network+

Official Website: https://certification.comptia.org/certifications/network
Cost: $319 ****$154 for students with valid ID and a .edu address****

Source of info below: https://www.springboard.com/blog/cybersecurity-certifications/

While the Network+ certification is not necessary for most jobs in cybersecurity, it does provide a great foundation on how computers and networks communicate with each other as well as some cybersecurity best practices.

What will you learn?
The goal of the Network+ certification is to measure participants' foundational knowledge of how systems and networks communicate and interact. In order to receive this certificate, you must understand the following:

- Networking concepts
- Infrastructure
- Networking operations
- Network security
- Network troubleshooting and tools
- What are your job options?

The salary you can earn varies -- but you can generally expect to make at least $40,000 a year with little or no experience. Network+ is an **optional** prerequisite for Security+.

CompTIA Security+

Official Website: https://certification.comptia.org/certifications/security
Cost: $339 ****$215 for students with valid ID and a .edu address****

Source: https://www.springboard.com/blog/cybersecurity-certifications/

Like Network+, Security+ is earned through CompTIA and is arguably the most important cybersecurity certification, as it provides a foundational understanding of cryptography, risk management, and vulnerabilities.

What will you learn?
This certification will prove you understand the proper way to install and configure systems as well as secure devices, application, and networks. In addition, you will be able to conduct threat analysis on these systems and employ mitigation techniques.

To pass the Security+ exam, you will need to have a thorough understanding of the following:

- Threats, attacks, and vulnerabilities
- Identity and access management
- Risk management
- Network architecture and design
- Cryptography and KPI
- What are your job options?

(ISC)2 Systems Security Certified Practitioner (SSCP)

Official Website: https://www.isc2.org/Certifications/SSCP
Cost: $250

Source: https://www.businessnewsdaily.com/9661-cybersecurity-certifications.html
The entry-level System Security Certified Practitioner (SSCP) prepares you for such jobs as systems security analyst, network security engineer and security administrator.

To achieve the SSCP, you must pass a single exam that includes questions that span:

- Access Controls
- Security Operations and Administration
- Risk Identification, Monitoring, and Analysis
- Incident Response and Recovery
- Cryptography
- Network and Communications Security
- Systems and Application Security

#Interviews & Potential Employers

The big payoff -- finally the chance to earn some $$!

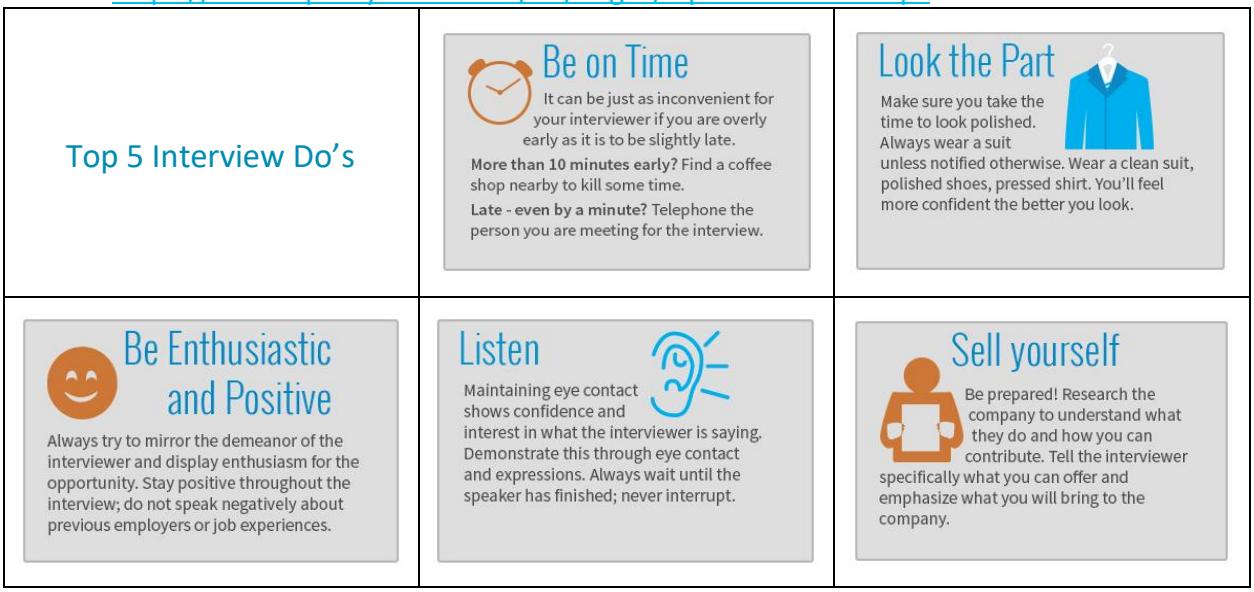
There are many different kinds of employers for cybersecurity:

- General tech industry - Cisco, Google, Microsoft, Amazon, Facebook, Apple, IBM
- Cybersecurity tech industry - McAfee, FireEye, Symantec, Sophos, Trend Micro
- Financial - Bank of America, Chase, Citi, Fidelity

- Academia - UT and TACC, Texas A&M, UTSA
- Telecommunications: AT&T, Verizon, Spectrum, T-Mobile
- Government - NSA, CIA, FBI, IRS, state & local government
- Others - **many** large companies have a cybersecurity group in their IT department, for example:
    - Yum! Brands that owns Taco Bell, KFC, and Pizza Hut
    - Target, Walmart
    - Ford, Toyota, GM
    - United, Southwest, American Airlines

But you have to get the job first! Review these resources from Apex Systems, a Cisco partner!
Career Readiness: https://www.apexsystems.com/Pages/CareerReadiness.aspx
Interview Tips: https://www.apexsystems.com/CE/Pages/Tips_Advice.aspx

Source: https://www.apexsystems.com/CE/Pages/Tips-Interviews.aspx



Source: https://www.apexsystems.com/CE/Pages/Tips-Interviews.aspx

Top 5 Interview Dont's

Don't Talk too Much

Answer questions directly and come prepared with clear, well thought out answers about your experience. Ask questions if you need clarification.

Don't Forget to Turn Off your Cell Phone

Not only is it rude for the interviewer, you don't want any interruptions or distractions. If your phone rings don't answer it! Politely apologize and turn it off.

Don't be Rude to the Receptionist

He or she may be solicited for feedback and also can give the interviewer a first impression of you.

Don't Have a Poor Handshake

Handshakes are one of your first impressions. Keep your handshake firm, and look the person in the eye. Avoid a limp handshake - it can seem weak or disinterested, or the arm pump handshake - it can seem aggressive.

Don't Ask About Benefits/Salary

On the first interview, you should not talk about time off, salary, or benefits.

Source: https://www.apexsystems.com/CE/Pages/Tips-InterviewPrep.aspx

Interview Prep Tips

Know your Resume

Re-familiarize yourself with past employers, roles, technologies, and employment dates. Managers will inquire about all sorts of details found within your resume, and your inability to recall these events can be viewed as a potential resume embellishment or lie.

Analyze the Job Description

JOB DESCRIPTION

Although many job descriptions may not be as clear or complete as you would wish, take the time to understand the role and responsibilities potentially asked of you. This may also help you in preparing for potential interview questions.

Have Questions Ready

Most interviews end with the interviewer asking,

"Do you have any questions?"

Although you may not, a few general questions can go a long way in showing your interest in the position.

"What makes a successful employee at your organization?"

"What are your company's or group's goals?"

Prepare your Answers in Advance

Even the best candidates struggle to recall specific situations and instances, especially in a stressful environment like an interview. A helpful tip is to recall 4 or 5 specific situations in which you were responsible for a favorable outcome. Once you've identified these scenarios, try to highlight them in a way that shows your teamwork, communication skills, determination, or ability to manage others. Having these scenarios handy will help you to quickly answer all types of behavioral questions.

Lay it all Out

Don't forget your best suit, to print out a few resumes, identify directions, and bring a notepad and pen.
If you lay them all out ahead of time, you'll be sure to remember them when the time comes.

Study Up

We've seen many candidates walk out of technical interviews looking like they were run over by a truck. This is usually due to their lack of technical preparation. Take the time to review technical documentation, study guides, online interview questions, or technical assessments before interviewing for an extremely technical role. You can find many of the resources on the web or ask your recruiter for potential options.

Learn about the Organization

WWW

Familiarize yourself with the client and their organization. A few minutes spent on the company website will show the interviewer that you are a well prepared candidate.