

# CYBERSECURITY CAREER ROADMAP

From zero to professional ethical hacker — step by step | sudoflare.com

## PHASE 1: FOUNDATION (Months 0-3)

<b>Networking Basics</b>	OSI Model, TCP/IP, DNS, DHCP, HTTP/S, Subnetting. Resource: Professor Messer Network+, TryHackMe Pre-Security (free)
<b>Linux Fundamentals</b>	CLI navigation, file permissions, bash scripting, package management. Resource: OverTheWire Bandit wargame
<b>Programming Intro</b>	Python basics: strings, loops, functions, files. Bash scripting. Resource: Python.org official tutorial
<b>Certification</b>	CompTIA Security+ or CompTIA Network+ — establishes foundational knowledge

## PHASE 2: CORE SECURITY (Months 3-6)

<b>Attack Types</b>	SQL injection, XSS, CSRF, buffer overflow, social engineering, phishing
<b>Cryptography</b>	Symmetric/asymmetric encryption, hashing (MD5/SHA), TLS/SSL, PKI
<b>Authentication</b>	OAuth, JWT, Kerberos, MFA, password storage (salted hashing)
<b>Vulnerability Management</b>	CVSS scoring, CVE database, patch management lifecycle

## PHASE 3: HANDS-ON HACKING (Months 6-12)

<b>Reconnaissance Tools</b>	nmap, theHarvester, shodan, maltego, recon-ng
<b>Web App Testing</b>	Burp Suite, OWASP Top 10, SQLmap, Nikto, gobuster — PortSwigger Academy (free)
<b>Exploitation</b>	Metasploit framework, searchsploit, manual exploitation
<b>Password Attacks</b>	Hashcat, John the Ripper, Hydra — GPU cracking techniques
<b>Practice Platforms</b>	TryHackMe, Hack The Box, VulnHub, PentesterLab

## PHASE 4: SPECIALISE & CERTIFY (Months 12-18)

<b>Penetration Testing</b>	OSCP (gold standard, \$1,500) or eJPT (\$200) — practical exams with real machines
<b>Web App Security</b>	BSCP (Burp Suite Certified) — PortSwigger practical exam
<b>Cloud Security</b>	AWS Security Specialty or CCSP — cloud is the primary attack surface
<b>Red Team Skills</b>	Advanced evasion, C2 frameworks (Cobalt Strike, Sliver), Active Directory attacks

## PHASE 5: BUG BOUNTY & CAREER (Month 18+)

<b>Bug Bounty Platforms</b>	HackerOne, Bugcrowd, Intigriti — start with low-scope programs
<b>Expected Earnings</b>	Low: \$50-500   Medium: \$500-5,000   High: \$5,000-25,000   Critical: \$25,000+
<b>Job Titles</b>	Jr. Pentester (\$60-85K)   Security Analyst (\$85-120K)   Sr. Pentester (\$120-160K)

**Portfolio Building**

Write CVE disclosures, maintain GitHub, blog about findings (securely)

**ESSENTIAL RESOURCES AT A GLANCE**

<b>TryHackMe.com</b>	Best beginner platform. Structured paths. Free tier available.
<b>HackTheBox.com</b>	Realistic machines. Intermediate to advanced. VIP \$14/mo.
<b>PortSwigger Academy</b>	Best free web security labs. Covers all OWASP Top 10.
<b>VulnHub.com</b>	Free downloadable VMs. Practice offline. No subscription.
<b>ExploitDB.com</b>	Largest public exploit database. Search with searchsploit.
<b>CVEDetails.com</b>	Browse all CVEs with CVSS scores and affected products.