

Cyber Sec Roadmap

NO!!!!! to HACKER

YES !!!! to - Cyber Security Engineer, Cyber Security Analyst, Penetration Tester, Information Security Engineer, Information Security Analyst etc (Fun Fact - all same with different titles for Job)

Check at the end , we have added guidance for some practical based platforms like

https://tryhackme.com/ And https://academy.hackthebox.eu/

For Now Lets move ahead

Also, we have mentioned the leading and helpful community group/channels links at last.

Assuming You are very new ⇒ {PHASE 1}

CompTIA A+ ⇒ What is it?

Here is the link- { https://www.comptia.org/certifications/a }

It will Help you in Understanding what Computer is and what you can do with it, what it consists of, How it works, How you can Troubleshoot any Problems.

The CompTIA A+ Core Series requires candidates to pass two exams: Core 1 (220-1001) and Core 2 (220-1002).

As a suggestion, just go through the course content

Generally there are two authors who provide the Quality content more than anyone.

- Mike meyers (paid course on udemy, dont worry head to the link given below to access and download the course for free)
- 2. Professor messers (free videos on youtube/his website)

For CompTIA A+ Core 1 ⇒

Mike meyers course ⇒ https://t.me/ethicalhackx/1057 (Download it for free)

Professor Messer course ⇒ https://www.professormesser.com/free-a-plus-training/a-plus-videos/220-1001-training-course/

CompTIA A+ Core 2 ⇒

Mike meyers course ⇒ https://t.me/ethicalhackx/1068 (**Download it for free**)

Professor Messer course ⇒ https://www.professormesser.com/free-a-plus-training/a-plus-videos/220-1002-training-course/

CompTIA Network+ ⇒ (N+) What is it?

Here is the link- { https://www.comptia.org/certifications/network }

It will Help you in Understanding what network is all about and inlcuding concepts that Helps you enough to understand how Data Communication works. Design and implement functional networks, Configure, manage, and maintain essential network devices, Implement network security, standards, and protocols, etc..

Again, two authors will be first recommendation as told you before:-

- Mike meyers (paid course on udemy, dont worry head to the link given below to access and download the course for free)
- 2. Professor messers (free videos on youtube/his website)

Mike meyers:- https://t.me/ethicalhackx/1110 (Download it for free)

Professor Messers:- https://www.professormesser.com/network-plus/n10-007/n10-007-training-course/

You will be even Good when you try to explore more from Netacad Learning from cisco - Under network Section https://www.netacad.com/courses/all-courses

Networking Essentials:-

CCNA: Introduction to Networks

CCNA: Switching, Routing, and Wireless Essentials
CCNA: Enterprise Networking, Security, and Automation

Linux ⇒ A Beautiful OS and wonderful to learn.

Highly recommend to complete - below courses ⇒

https://www.netacad.com/courses/all-courses

- 1. NDG Linux Unhatched
- 2. NDG Linux Essentials
- 3. NDG Linux I
- 4. NDG Linux II

To Implement Practically all learnt knowledge ⇒ { https://linuxjourney.com/}

Bandit is a MUST ⇒ { https://overthewire.org/wargames/}

Now you are done with major basics Its time to jump into some advance knowledge about Security field or Cyber Security.

Moving to ⇒ {Phase 2}

CompTIA Security+ ⇒ (Sec+) What is it?

Here is the link- { https://www.comptia.org/certifications/security }

Assess the security posture of an enterprise environment and recommend and implement appropriate security solutions Monitor and secure hybrid environments, including cloud, mobile, and IoT

Operate with an awareness of applicable laws and policies, including principles of governance, risk, and compliance Identify, analyze, and respond to security events and incidents

Cyber Security Awareness is a MUST weather you move to pentest or perform Incident Response - As long you dont understand what and How you Social Engineering is done will be very hard to grow. Fundamentals is everything from IT Sec to Access Control and Cryptography

<u>Professor Messers:- https://www.professormesser.com/security-plus/sy0-601-video/sy0-601-comptia-security-plus-course/</u>

NOTE⇒ ———Professor messer's A+ and N+ and SEC+ course are free of cost————

You will be Even better if you have explored little from Cisco learning as well Introduction to Cybersecurity

Cybersecurity Essentials

Certified Ethical Hacker ⇒ (CEH) What is it?

Here is the link- { https://www.eccouncil.org/programs/certified-ethical-hacker-ceh/ }

Certified Ethical Hacker CEH v11 will teach you the latest commercial-grade hacking tools, techniques, and methodologies used by hackers and information security professionals to lawfully hack an organization.

Ceh Modules and Lab manuals Pdf along with lab Tools can be found at @ https://t.me/ethicalhackxcom

⇒ Above are Core Survival Skills which is must needed when you are in IT.

Administration level knowledge

Linux Adminstration ⇒

Youtube video ⇒ https://www.youtube.com/watch?v=wsh64rjnRas

Or instead you can go for a udemy course which we provide for free i.e :-

Course name ⇒ Complete Linux Training Course to Get Your Dream IT :-

https://t.me/ethicalhackxcom/126237

Windows Administration ⇒

https://www.youtube.com/watch?v=IrtYDS5WKR0&list=PLYogJ_kxL1wTesq-vNxEc8tjDOHvszeWf

Congratulations, if you have Completed the all above Concepts. You are a Good IT GUY.

Crossed a Baby Step!!

Servers and Clouds Concepts are Optional in order to understand how your Infra works - Better to have Not a mandate ⇒

CompTIA Server+ - Fast Track

https://www.youtube.com/watch?v=vJV-GBZ6PeM&list=PLb7fvlSdTE_FoyuHzXFd50TtRmAUTdoju

CompTIA Cloud+ - Fast Track

https://www.youtube.com/watch?v=gRfYrAQHbTg&list=PLJEwQ1of-My77×9F8vganZzmjyONzSiOi

Great You have now Completed all the prerequisites for Cyber Security!!!

You are Free to take - Azure - AZ-900, AZ-104, AZ-500 Series too

Now we are Good to Divide to Different Track as per Interest of a Specific user ⇒

NOTE ⇒ We are making seperate RED SIDE AND BLUE SIDE roadmaps which you will be getting in next couple of weeks.

For now just a brief ⇒

At First What are Red Side and Blue Side ⇒

⇒ A RED TEAM consists of security professionals who act as adversaries to <u>overcome cyber security controls</u>. Red teams often consist of independent ethical hackers who evaluate system security in an objective manner.

They utilize all the available techniques (discussed below) to find weaknesses in people, processes, and technology to gain unauthorized access to assets. As a result of these simulated attacks, red teams make recommendations and plans on how to <u>strengthen an organization's security posture</u>.

⇒ A BLUE TEAM consists of security professionals who have an inside out view of the organization. Their task is to protect the organization's critical assets against any kind of threat.

They are well aware of the business objectives and the organization's security strategy. Therefore, their task is to strengthen the castle walls so no intruder can compromise the defenses.

RED Side ⇒

Need to create an Account from elearnSecurity -

INE - Penetration Testing Student {PTS} Cert ⇒ (EJPT)

https://my.ine.com/CyberSecurity/learning-paths/a223968e-3a74-45ed-884d-2d16760b8bbd/penetration-testing-student

Blue Side ⇒

Every Starter in Blue Teaming will kick start the career from SOC L1 - Highly recommend to complete the below course CyberOps Associate

https://www.netacad.com/courses/all-courses

You are Good for SOC L1 Job - once you get a Job - Sub for Payed Service from SBT

Wanna be Network security Engineer?

⇒ Network Security - https://www.netacad.com/courses/all-courses

Certified Network Security Specialist - from ICSI - which was made Free during Covid make use of this ⇒

https://www.icsi.co.uk/courses/take/icsi-cnss-certified-network-security-specialist-covid-19/texts/11570280-guided-exercise-analysing-telnet-network-traffic

Programming resources ⇒ **Mostly Python**

https://github.com/vinta/awesome-python

Books ⇒

https://www.oreilly.com/library/view/learn-python-the/9780133124316/

https://automatetheboringstuff.com

https://runestone.academy/runestone/books/published/thinkcspy/index.html

Practice ⇒

https://www.hackerrank.com

http://www.practicepython.org

https://www.codecademy.com/catalog/language/python

Blogs and Tutorials ⇒

https://docs.python.org/3/tutorial/index.html

https://www.py4e.com

https://learnxinyminutes.com/docs/python/

https://realpython.com/python3-object-oriented-programming/

https://docs.pythonguide.org

https://blog.finxter.com/subscribe

https://www.udacity.com/course/introduction-to-python--ud1110

https://www.edx.org/course/introduction-to-computer-science-and-programming-7?

index=product&queryID=781a33919320730cb13c2308a43fb525&position=1

https://www.youtube.com/playlist?list=PLIrxD0HtieHhS8VzuMCfQD4uJ9yne1mE6

These can be used for learning almost any programming language ⇒

https://runestone.academy/runestone/books/published/thinkcspy/index.htmlhttps://www.codecademy.com/https://ww

What is Tryhackme ⇒

TryHackMe takes the pain out of learning and teaching Cybersecurity. Their platform makes it a comfortable experience to learn by designing prebuilt courses which include virtual machines (VM) hosted in the cloud ready to be deployed. This avoids the hassle of downloading and configuring VM's. Their platform is perfect for CTFs, Workshops, Assessments or Training.

Features ⇒ Ranking system, Room Completion Badges to enhance your profile, Streak sytem to encourage hackers like us to Hack daily-Learn daily

Also They have 5 Learning paths for Beginners or intermediates to start solving rooms and learn concepts.

Those Learning Paths are ⇒

- 1. Complete Beginner's Path
- 2. Comptia Pentest+
- 3. Offensive Security path
- 4. Cyber defense Path
- 5. Web Fundamentals Path

⇒ https://tryhackme.com/hacktivities

However, Every beginner keeps asking the question "what are rooms" and "how do I connect to network". Thats the reason, They created a Getting Started page that explains what we do and how the site works. \Rightarrow

https://tryhackme.com/room/tutorial

Also, They also have create an official TryHackMe room that shows you how to connect to Their network using Openvpn ⇒ https://tryhackme.com/room/openvpn

Tryhackme FAQ link ⇒ https://tryhackme.com/faq

Link to all top Freerooms list on Tryhackme ⇒

https://hacklido.com/blog/9-top-free-tryhackme-thm-rooms-that-you-should-try/6

What is Academy-Hackthebox ⇒

HTB Academy is cybersecurity learning the HTB way! An effort to gather everything They have learned over the years, meet our community's needs and create a "University for Hackers," where users can learn step-by-step the cybersecurity theory and get ready for the training playground of HTB, our labs. All the way from guided to exploratory learning, learn how to hack and develop the hacking mindset that will enable you to assess and create secure systems.

HTB Academy's goal is to provide a highly interactive and streamlined learning process to allow users to have fun while learning. Students are presented with material in digestible chunks with examples of commands and their output throughout, not just theory. Target hosts are provided so students can reproduce the materials presented in each section for themselves. There are hands-on exercises that serve as "checkpoints", and skills assessments to test students' understanding of the Module content.

Difference between Hack The Box and HTB Academy?

Let's put it this way: Hack The Box is a training platform, HTB Academy is a learning one. Hack The Box is the creator & host of Academy, making it exclusive in terms of contents and quality.

HTB Academy FAQ link ⇒ https://academy.hackthebox.eu/faq

Newly made Cyber sec forum for all to discuss, write blogs, share writeups and enjoy the learning with growing community ⇒ https://hacklido.com/

Leading Groups/channels for Help and guidance anytime ⇒

- 1. https://t.me/ethicalhackx (Channel)
- 2. https://t.me/ethicalhackxcom (Group)
- 3. https://t.me/informationsecuritylife (Channel)
- 4. https://t.me/Penetrationtestersgroup (Group)
- 5. https://t.me/hacklido (Channel)
- 6. https://t.me/hacklidocom (Group)
- 7. https://t.me/infoseczone (Channel)
- 8. https://t.me/geekyboychat (Group)

Contributors⇒

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Happy Learning 🧐 🗲 🖖