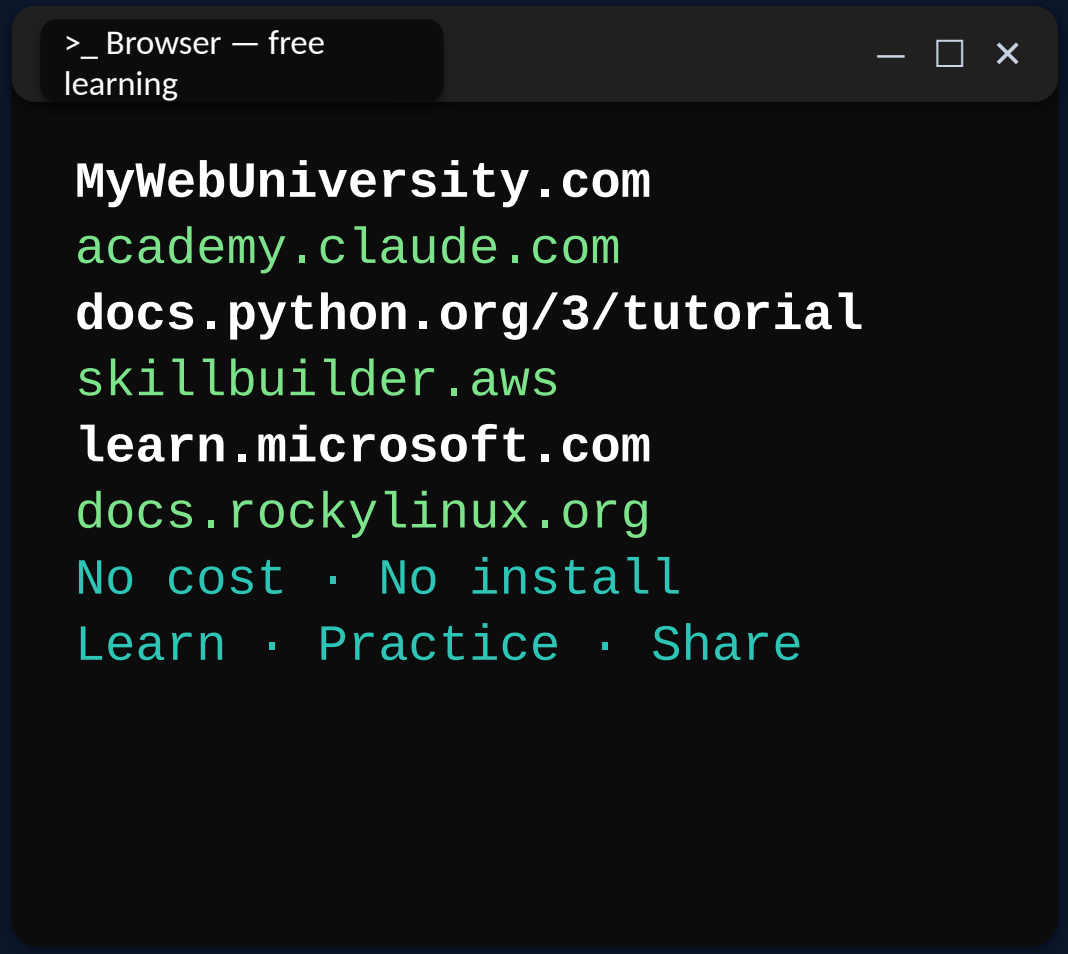


LESSON 9 OF 12

Free Learning Websites

Linux · Python · AI · Cloud · Security · Claude

Networking & Cybersecurity: Cisco NetAcad, Professor Messer, TryHackMe & OverTheWire

Full Course · Free learning sites · checked Nov 2026

What You Will Learn in Lesson 9

- Networking first, then security
- Cisco Networking Academy: free self-paced courses
- Professor Messer: free CompTIA video courses
- TryHackMe: free rooms with an in-browser attack machine
- OverTheWire: Bandit and other wargames
- Practice networking commands on Linux
- Ethics, authorization, and a free path

Cisco Networking Academy: netacad.com

Course	Details
Networking Basics	About 22 hours — how networks, IP addressing and Ethernet work
Introduction to Cybersecurity	About 6 hours — threats, protecting yourself and organizations
More free courses	Networking Devices, Endpoint Security, Python, Linux, Packet Tracer
Packet Tracer	Free network simulator — build and test networks virtually
Cost	Free self-paced courses with digital badges
Next	Instructor-led CCNA paths through partner academies

Professor Messer: professormesser.com

Feature	Details
What	Free complete video courses for CompTIA certifications
Courses	A+ (hardware, OS), Network+ (networking), Security+ (security)
Format	Short videos following the official exam objectives
Live	Free monthly study group streams with Q&A
Also on	YouTube — watch in order, playlist by exam
Paid extras	Optional notes and practice exams — not required

Practice: Networking Commands on Linux

```
$ ip addr show                    # your IP addresses and interfaces
$ ip route                        # default gateway and routes
$ ping -c 4 mywebuniversity.com   # is a host reachable?
$ tracepath mywebuniversity.com   # hops along the path
$ dig mywebuniversity.com         # DNS lookup (bind-utils / dnsutils)
$ ss -tulpn                       # listening ports and services
$ curl -I https://www.python.org # HTTP response headers
$ sudo firewall-cmd --list-all    # Rocky/RHEL/Fedora firewall
$ sudo ufw status                 # Ubuntu firewall
```

TryHackMe: tryhackme.com

Feature	Details
What	Guided, hands-on cybersecurity lessons called 'rooms'
Free content	Hundreds of free rooms (650+), beginner to advanced
In the browser	Free AttackBox and target machines — nothing to install
Topics	Linux basics, networking, web security, defensive (SOC) and offensive
Start with	Pre Security and Cyber Security 101 paths
Premium	Optional — more paths and longer machine time

OverTheWire: Bandit Wargame

```
# overthewire.org/wargames/bandit — free, legal practice
$ ssh bandit0@bandit.labs.overthewire.org -p 2220   # password: bandit0
bandit0@bandit:~$ ls -la
bandit0@bandit:~$ cat readme              # password for the next level
bandit0@bandit:~$ exit
$ ssh bandit1@bandit.labs.overthewire.org -p 2220
# Skills: ls, cat, find, grep, sort, uniq, base64, tar, ssh keys
# Next games: Natas (web), Leviathan, Krypton
```

Ethics and Authorization

Rule	Why
Only test what you own or are allowed to test	Unauthorized access is illegal
Use practice platforms	TryHackMe, OverTheWire, your own lab VMs
Read each site's rules	Some forbid sharing solutions or scanning
Protect people's data	Report problems responsibly; never publish secrets
Learn defense too	Patching, logs, firewalls, backups, strong passwords + MFA
More free resources	NIST CSF, OWASP Top 10, CISA free training

A Free Networking & Security Path

Weeks	Do this
1–3	Cisco Networking Basics + Professor Messer Network+ videos
4	Linux networking commands; build a network in Packet Tracer
5	Cisco Introduction to Cybersecurity
6–7	TryHackMe Pre Security path (browser labs)
8	OverTheWire Bandit levels 0–15
9–12	Professor Messer Security+ videos + TryHackMe Cyber Security 101
Ongoing	Secure your own Linux server: firewall, SSH keys, updates

Summary and Homework

- Networking first, then security
- Cisco NetAcad: free courses + Packet Tracer simulator
- Professor Messer: free A+, Network+, Security+ video courses
- TryHackMe: free rooms with browser labs; OverTheWire: free wargames
- Only test what you own or are authorized to test
- Homework: run the Linux networking commands and finish Bandit level 0 → 5

Thank You! 🙏

Free videos & PDFs: www.MyWebUniversity.com

Slides for this lesson: MyWebUniversity.com/presentations

YouTube: @MyWebUniversity · @MyWebUniversity-Dari

Wahidullah Lutfy — Founder and Director of IT of MyWebUniversity, and CS teacher

Book: The Direct Path to Linux Ubuntu (Amazon · Barnes & Noble)

Learn it, then pass it on.