

Pathway to Professional Growth in Cybersecurity

A complete, flexible, and affordable roadmap to break into cybersecurity — from beginner-friendly certifications to full Master's degrees — with global credibility in both Western and Middle Eastern job markets.

Part 1: Entry-Level Cybersecurity Certifications & Foundations

This is where most professionals should start. These certifications and practical courses are **industry-validated, flexible, and low-cost** — perfect for getting hired fast.

Certificate / Course	Platform	Cost	Duration	Focus / Notes
Google Cybersecurity Certificate	Coursera	~\$39/month	6 months	Job-ready, beginner-focused
IBM Cybersecurity Analyst	Coursera	~\$39/month	8 months	Labs & hands-on experience
ISC2 Certified in Cybersecurity (CC)	ISC2	Free (promo)	Flexible	Globally respected, no experience needed
CompTIA Security+	CompTIA	~\$370 (exam)	3–6 months prep	Most widely accepted entry cert
Cisco CyberOps Associate	Cisco Skills for All	Free	~3 months	Network security, SOC roles
Cisco Introduction to Cybersecurity	Cisco	Free	15 hours	Basic cybersecurity overview
TryHackMe	TryHackMe	Free & Paid	Ongoing	Real-life cyber labs (hands-on)

 **Recommendation:** Take 1–2 certifications + TryHackMe in parallel for a balanced skillset (theory + practice).

Part 2: Computer Science Fundamentals (Free or Low-Cost)

If you don't have a tech or IT background, these courses will teach the **core principles of computing and programming** — helpful for deeper cybersecurity roles.

Platform	Course or Program	Link	Notes
University of the People	Bachelor's in Computer Science	Visit Site	Tuition-free; \$120 per exam
Harvard CS50x	Intro to Computer Science	Take CS50	Free; optional \$150 certificate
MIT OpenCourseWare	Various CS & security topics	Explore OCW	Self-paced, top-tier material
OpenLearn (UK)	Free cybersecurity & IT courses	Visit OpenLearn	Beginner friendly
Saylor Academy	Free college-level courses	Visit Saylor	Some courses eligible for college credit

Part 3: MicroMasters (Graduate-Level Online Credentials)

MicroMasters programs are **graduate-level short courses** by top universities. They can stand alone or be converted into Master's credits.

Program	MicroMasters Cost	Credits Toward MS	Duration	Link
RIT – Cybersecurity	~\$1,200	9 credits	~1 year	View
UMD – Cybersecurity	~\$1,300	Partial	~1 year	View
Delft University – Cybersecurity	~\$1,350	Varies (EU options)	~1 year	View

Part 4: Online Cybersecurity Master's Degrees (Affordable & Respected)

These Master's programs are **fully online, flexible, and globally accepted**:

University	Cost (USD)	Duration	Region Fit	Link
University of London (UK)	~\$17,000	2–5 years	UK, Middle East	View
CU Boulder (USA)	~\$17,000	2–4 years	US market	View

Part 5: Advanced Cybersecurity Certifications (Post-Experience)


Best pursued after gaining some job experience in cybersecurity roles:

Certificate	Platform	Cost	Duration	Notes
CISSP	ISC2	~\$749	Self-paced	Requires 5 years of relevant work experience

Part 6: What is a MicroMasters?

A **MicroMasters** is a **series of graduate-level online courses** by accredited universities, delivered via platforms like edX. It is:

- More advanced than basic certifications
- More affordable and flexible than full degrees
- Often accepted for credit in online Master's programs

 Example: **RIT's Cybersecurity MicroMasters** provides **9 credits** toward their online Master's in Cybersecurity.

Quick Summary Flow

Step 1: Take certifications (Google, CompTIA, Cisco, ISC2, TryHackMe)

Step 2: Learn computing fundamentals via CS50, UoPeople, OpenLearn

Step 3: Consider a MicroMasters in cybersecurity

Step 4: Apply credits toward a full online Master's

Step 5: Earn advanced certifications like CISSP (if desired)