

Cybrary Cybersecurity Engineer Syllabus

Last Updated: 08-14-2018

General Information

Rise to the challenge of becoming an elite Cybersecurity Engineer. Along the way you will have the opportunity to connect with real world industry professionals and mentors. As you work through the program you will open up highly in-demand job opportunities; as well as, receive the appropriate knowledge, skills and abilities in order to earn a new job. In addition, much of the curriculum will provide you the resources to sit for, **and pass**, industry recognized certification exams.

Expectations and Goals

We have found that the students who are most successful in the program have ambitious goals and spend at least 10 hours a week on learning. This includes time for engaging with your mentor and your community.

Cybersecurity Engineers are highly sought after in the cyber security industry, and this program will prepare you to confidently apply for this job role and start a new career in cyber security.

Prerequisites	The Cybersecurity Engineer curriculum is a curriculum for professionals with 4 years experience or equivalent study in the field. For those with less than 4 years of experience in Cyber please look at our Network Engineering, SOC analyst or PenTester Career Path.
Office Location & Hours	EST +7, Manama, Bahrain EST -3, Las Vegas, Nevada EST 0, Greenbelt, MD
Certifications You Will Be Prepared For	IC2 CCSP CompTIA CASP CISSP CRISC Comptia Cloud+ CISM

Course Schedule

Cybersecurity Engineer			
Week	Topic	Length (approx.)	Format
Step 1	Centralized Monitoring Preliminary Scanning Data Backup and Recovery	5	Hands On Virtual Lab
Step 2	Meet your Mentor Session (via Slack Community)	.5	Slack Community Chat
Step 3	Vulnerability Scan Analysis	2	Hands on Virtual Lab
Step 4	Fundamental Vulnerability Management Certification Course	1	On Demand Video Course
Step 5	Identifying Key Assets	1	Hands on Virtual Lab
Step 6	ISC2 Certified Cloud Security Professional (CCSP)	5.5	On Demand Video Course
Step 7	<p>Lab 1: Using PowerShell to Analyze a System Identify whether High Risk Systems were Affected</p> <p>Lab 2: Advanced Techniques for Malware Recovery Understand Cloud Computing</p> <p>Lab 3: Intermediate Cloud Security</p> <p>Lab 4:</p>	5-7	Hands On Virtual Labs to develop real world experience

	End User Security Awareness		
Step 8	CompTIA CASP	11	On Demand Video Course
Step 9	CASP Virtual Lab	5	Hands On Virtual Lab
Step 10	CASP Practice Questions	3	Practice Questions
Step 11	CASP Practice Exam	1.5	Practice Exam
Step 12	Cryptography	2	On Demand Video Course
Step 13	Cryptography Set 1	2	Practice Questions
Step 14	CompTIA Cloud +	8	On Demand Video Course
Step 15	Microsoft Monitoring and Operating a Private Cloud with System Center 2012 Virtual Lab	15	Hands on Virtual Lab
Step 16	<p>Lab 1: Applying Filters to TCPDump and Wireshark</p> <p>Lab2: Create Custom Snort Rules Dynamic Malware Analysis Capstone</p> <p>Lab 3: Parse Files Out of Network Traffic</p> <p>Lab 4: IDS Setup Comprehensive Threat Response</p>	5-7	Hands on Virtual Lab
Step 17	ISC2 Certified information Systems Security Professional (CISSP)	13	On demand Video Course
Step 18	Certified Information Systems Security Professional (CISSP) Virtual Lab	5	Hands on Virtual Lab
Step 19	CISSP Practice Questions	3	Practice Questions
Step 20	CISSP Practice Test	1.5	Practice Test

Step 21	Denial of Service PCAP Analysis	1	Hands On Virtual Lab
Step 22	Developing SQL Databases Virtual Lab	5	Hands on Virtual Lab
Step 23	Oracle 1Z0-051: SQL Fundamentals 1	1.5	Practice Test
Step 24	Oracle 1Z0-061: SQL Fundamentals	1.5	Practice Test
Step 25	<p>Lab 1: Recover From SQL injection Attack</p> <p>Lab 2: Recover from Browser Based Heap Spray Attack Recover From Web Based Flashpack Incident</p> <p>Lab 3: Recovering Data and Data Integrity Checks</p> <p>Lab 4: Recovering from Inadequate Patching Post Incident Service Restoration</p>	5-7	Hands on Virtual Lab
Step 26	Risk Management	1	Micro Course
Step 27	Risk Management Framework	2	On Demand Video Course
Step 28	Identify Whether High-Risk Systems Were Affected	1	Hands On Virtual Lab
Step 29	CIRP Creation and Disaster	3	Hands On Virtual Lab
Step 30	Report Writing for Presentation to Management	1	Hands On Virtual Lab
Step 31	Security Architecture Fundamentals	1	Micro Course
Step 32	Corporate Cybersecurity Management	1	On Demand Video Course
Step 33	Enterprise Security Architecture	1	On Demand Video Course
Step 34	Analysis and Recommendation Report	2	Hands On Virtual Lab

Step 35	Project Management Professional (PMP)	5.5	On Demand Video Course
Step 36	PMI: Project Management Professional	5	Practice Test
Step 37	CISM	8	On Demand Video Course
Step 38	Catch-up and review week	7	N/A
Step 49	Resume and Job Prep Session (w/ Mentor)	N/A	Job Preparation

Cybrary Insider Pro FAQ:

GENERAL

What is the training format of Cybrary?

All of the training through Cybrary is on-demand and available 24/7:

- On-demand Video-Based Courses
- Virtual Hands On Labs
- Capture the Flag Assessments
- Monthly Live Webcasts
- Monthly Live Course

Can I “test out” of any of my assignments?

If you have direct work experience or hold a current certification in a subject you may skip the content and move to the next subject. The purpose of the career path is to ensure you have all the Knowledge/skills/abilities associated with the program. If you already have them there is no need to duplicate efforts.

Will any of the Career Paths prepare me to take any certifications?

Each career path has certification courses, these courses will prepare you to take the certification it is teaching. If you feel like you need more training or other resources please reach out to the mentors to get supplemental material. This material may be on Cybrary but they can also make recommendations on things to use outside of Cybrary to help you obtain that certification.

Can I change Career Paths once I start one?

Of course! We want your learning experience to be exactly what you are looking for. If you start a career path that you are not comfortable with, just let a member from our Customer Success Team know and they will get you moved over.