

# Cyber Security Bootcamp Student Handbook

The Cyber Security Bootcamp is a program to accelerate learners' entry into a career in cyber security. Learners will build a strong foundation in technical skills and analytical skills needed for successful employment while developing the mindset to become lifelong learners.

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## 1. The Curriculum - 11 Modular courses

**Course 1 - IT Essentials** 

**Course 2 - Security Essentials** 

**Course 3 - Programming for Cyber Security** 

**Course 4 - Blue Team Fundamentals** 

Course 5 - Security Policies: Governance, Risk and Compliance

**Course 6 - Security Policies: Vulnerability Assessment** 

**Course 7 - Security Policies: Incident Response** 

**Course 8 - Encryption** 

**Course 9 - Threat Defence Operations** 

**Course 10 - Forensics** 

**Course 11 - Threat Intelligence** 

#### **Capstone Project**

This final project gives the learners an opportunity to apply their learnings from the entire program to apply cybersecurity foundations, frameworks and tools to explore a problem and present their findings.

Upon completing the project, learners will present their project to their cohort mates and the public at a Demo Day event.

## **Projects**

## **Types of Course projects**

#### **Reports**

In the field of cyber security, reports provide a way to document and communicate information about threats and vulnerabilities to stakeholders, including management, clients, and other cyber security professionals. Reports can also be used to identify trends and patterns in cyber threats and vulnerabilities, which can help cybersecurity professionals to better understand and respond to these issues. This information is critical for maintaining the security and reliability of systems and networks and for protecting against potential cyber threats.

In this program, learners will develop **seven (7) main reports** which will form part of their portfolio to refer to during their job search efforts.

### Other project formats

There are four (4) other project formats including a Workflow, Custom Playbook, Policy creation and Risk Management Plan

#### Log Monitoring Workflow - Project

- Log Monitoring Workflow
  - o apply the programming tools and commands learned
  - establish a workflow to monitor unusual traffic, including the key commands or scripts to be used

#### **Custom Playbook and Policies - Projects**

There is one Playbook and one policy set to be produced as course projects

- Create a custom playbook using the NIST Incident Response Lifecycle as well as the guidelines shared by CISA for developing playbooks meant for incident response.
- The playbook will address a potential Cyber Security breach in the scenario described in the project.
- Students must generate separate procedures that call (activate) the Playbook.
- They will utilize the NIST 7-step incident process for this project

#### **Risk Management Plan**

There is one Risk Management plan that will be submitted as a course project.

• Students will use ISO 27001 Risk Management Framework to create a Risk Management Plan for the scenario described in the case study.

utilize understanding of Risk Assessment Table, Risk Treatment Table, and Statement of Applicability (SOA) to complete the Risk Management Plan.

## **Quizzes**

This program does not comprise any formal exams, but you will be given multiple choice quizzes to help review concepts that may be new to you. These will be used for self evaluation and to help us determine your level of understanding and also help us determine if you are progressing as expected.

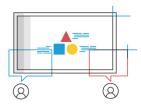
We have also attached the following resources if you are looking for even more content. We think our curriculum is pretty awesome, and we hope you do too. But if you want to explore the world of cyber security beyond the core and stretch work in Compass, check out these links:

HackTheBox: <a href="https://www.hackthebox.com/">https://www.hackthebox.com/</a>

TryHackMe: <a href="https://tryhackme.com/">https://tryhackme.com/</a>

PicoCTF: <a href="https://picoctf.org/">https://picoctf.org/</a>

Code Wars: <a href="https://www.codewars.com/">https://www.codewars.com/</a>



## The 5 rules

1. Ask for help.

Communicate with the Education Team, rely on your cohort mates and utilize mentors.

2. Put in the hours.

Be on time and present for lectures. Expect to put in 25 hours a week.

3. Take breaks & get proper sleep.

With such long days, you can burn out fast if you don't take care of yourself. Take breaks, sleep, eat - coming back to something with fresh eyes will save you hours.

4. Don't compare yourself to others.

Imposter syndrome is real and it is okay - it helps to talk it through. If you reach out we can support you and remind you to instead compare yourself to where you were last week and the week before.

5. Get comfortable being uncomfortable.

Ultimately, what you get out of this program is an ability to deal with discomfort. You will not "get" everything right away, and it can be hard to accept that you only understand the gist of something before moving on, but through repetition and practise you will get there. By the end of the program, you will learn that you can learn anything if you put in the hours and the effort.

## **Best Practices**

You have a strong network of instructors, mentors, staff, and of course, your peers to support you. We encourage you to reach out early and often to get the most out of the program. Ask questions in lecture, make regular assistance requests, and be active with your cohort; this program is easier to go through when collaborating with others. We will set up Discord channels to help you meet your cohort and breakouts for additional support, but it is up to you to reach out to get the help you need!

In addition, taking care of your mental and physical health are absolutely paramount to sustaining success. Make sure to get enough sleep, take regular breaks, and maintain healthy eating habits. Please reach out to the Education team if you are looking for more tips, if you are facing difficulties outside of the program, or if you just want to chat. Here are some additional resources that past students have found helpful:

Mindshift: https://www.anxietycanada.com/resources/mindshift-cbt/

Canadian Mental Health Association: <a href="https://cmha.bc.ca/">https://cmha.bc.ca/</a>

Headspace: https://www.headspace.com/headspace-meditation-app

## **Important Dates:**

There will be several dates and times that are mandatory to attend. We will remind you in Discord when these days come, but here is also a list of them for your reference.

#### **Daily Lecture:**

Lectures will run Monday to Friday

- Cyber East Lectures will be at: 7:30am PT / 10:30 am ET
- Cyber West Lectures will be at: 10am PT / 1pm ET

It is mandatory to be in attendance for **all lectures**, and to have your cameras on! Please inform your Student Success Coordinator as soon as possible if you have an emergency or extenuating circumstance that prevents you from attending a lecture at <a href="mailto:cyber.security@lighthouselabs.com">cyber.security@lighthouselabs.com</a>.

#### **Career Services Workshops**

Our Career Services team has some great workshops planned during your time at Bootcamp to help prepare you for the job hunt!

#### Week 12 & Demo Day

There are several important dates in the final week to make note of. In order to present on Demo Day you must attend your scheduled Tech Run and complete a dry-run. Please watch Discord especially closely in the final weeks to ensure you are attending events at the correct times. Please be punctual for these demonstrations! We will also be sending reminders and further details closer to the final week.

#### W12D1 - Dry Runs

Complete the **Dry Run** activity on Compass. Please do so by submitting an Assistance Request to present your full Final Project to a mentor, and mark it as complete once you receive feedback on how to improve your presentation for Demo Day so that you're feeling confident.

#### W12/D2 - Dry Runs

Complete the **Dry Run** activity on Compass.

#### W12/D3 - Dry Runs

Complete the **Dry Run** activity on Compass.

#### W12D4 - Demo Day! Time - 12pm PST / 3pm EST

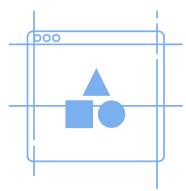
This is the big day! Presentations will begin at 3:00 PM ET but please be backstage 15 minutes early to get settled and for us to take attendance.

#### W12D5 - Life After Lighthouse - time TBD

Your last mandatory meeting as a student! Career Services will talk about Life After Lighthouse Labs.

All dates and times are subject to change, but please assume these are correct unless you are told otherwise.

We look forward to seeing you for all of Bootcamp!



## **Evaluation**

There will be points in this program where you fail - and *that's okay*. Your project might get rejected, you might blank on a quiz, not just one thing is going to affect your success in the program as there are many different assessment points within each module. If we are concerned about your progress we will reach out to set up resources and see how we can help. We will

remind you about the best practices listed above and encourage you to speak to mentors and instructors more.

The following list includes the different ways that you will be evaluated throughout the Cybersecurity Program:

- Graded project evaluations use rubrics based on our Cybersecurity Competency Framework.
- Ungraded evaluations receive feedback through peers and self-assessments.
- There is no midterm or final exam.

## Attendance policy

You have made a commitment to work towards achieving academic success by enrolling. In order to achieve success in your studies, it is important that you participate, and engage fully with all your scheduled activities such as: lectures, workshops, and seminars, etc. Lighthouse Labs therefore regards attendance in lectures, with cameras on, as an essential part of students' studies. Our attendance policy is created in accordance with regulations and by-Laws, as well as to establish Lighthouse Labs' expectations of the effort that students will put into their education.

A student is expected to attend all lectures on time and staff will be monitoring attendance. If you are going to miss a lecture, please let us know ahead of time. We know life happens and we will do our best to accommodate you, however it is not acceptable to simply skip the lecture without an explanation. Upon missing 3 days of instruction without a justified explanation, a student will be issued a written warning by the Education Manager notifying them that upon missing a 4th day of instruction Lighthouse Labs reserves the right to dismiss the student.

Also, just as best practice, try to say goodbye to the instructor if you need to leave the lecture early.

## **Dismissal**

We do not take dismissal lightly and will go out of our way to support you. If you are using the program correctly, communicating proactively, and listening to our advice then we should be able to get you back on track. There are still cases where dismissal is the only option.

Academic dishonesty

We understand there will be pair programming and sometimes you will look at other projects for inspiration. That's fine! A good rule of thumb is "be able to explain your code - why did you put this line here or that function there". We know being online it is tempting to just find the code and copy/paste it. We take academic dishonesty very seriously - if you plagiarize your cohort mates' work, or take code from the internet and submit it as your own, you will be dismissed from the program.

#### Consistent absenteeism

As per our attendance policy, if you miss more than 3 classes without a justified explanation you will be considered for dismissal. Please reach out if there are any issues on your end with attending class.

## **Career Services**

Our expert Career Services team works with job-seeking students to help you outline your professional goals, and map out the most effective way to achieve them. Our team takes an immersive, personalized, hands-on approach to help you sharpen your resumé and hone your interview skills. We then tap into our wide-ranging industry networks to connect you with potential employers and networking opportunities.

You need to be dedicated to creating your own opportunities. Finding a job is no easy task, and even with Career Services to guide your way we expect you to be on your game. Be a kick-ass programmer, focus on building your portfolio and keep your (rubber) ducks in a row (resumé, LinkedIn, GitHub).

With years of human resources and career counseling experience under their belts, our Career Services team is motivated by connecting our graduates with amazing opportunities. You can expect:

#### **Career Coaching**

We'll help you cultivate your career goals and lay out a plan of attack.

#### Interview and Resumé prep

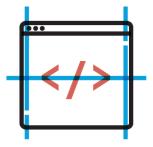
You will have endless opportunities to practice your elevator pitch and we'll show you how to highlight your assets.

#### National and localized networking

Whether you want to see career options close to home or coast-to-coast, we'll help promote you to our expansive network of employers.

#### A Pulse on the industry

Our Career Services team is highly connected to the industry. We have our fingers on the pulse of what skills are in demand, and know how to best prepare our students for successful, fulfilling careers.



## Staff Directory

Do you need to get a hold of someone, but not sure who to contact?

Team	Discord	Email	Position	Hours	Location				
Education									

Chetna Robinson	@Chetna	chetna.robinson@ lighthouselabs.com	Education Program Lead	T-S 9AM-5PM PT	ON			
Kristen Falcioni	@Kristen Falcioni	kristen.falcioni@ lighthouselabs.com	Education Manager	M-F 10AM-6PM ET	ON			
Hajrah Popalzay	@hajrah_popalzay	hajrah.popalzay@ lighthouselabs.com	Sr. Student Success Coordinator	M-F 10AM-6PM ET	ON			
Kendell Kitt	@Kendell Kitt	kendall.kitt@lightho uselabs.com	Sr.Student Success Coordinator	M-F 10AM-6PM PT	ВС			
Olivia Fedato	@Olivia F	olivia.fedato@lighth ouselabs.com	Student Success Coordinator	M-F 8AM-4PM MT	АВ			
Katie Whelan	@Katie Whelan	katie.whelan@light houselabs.com	Student Success Coordinator	M-F 7AM-3PM PT	ВС			
Career Services								
CS Staff	careerservices@lighthouselabs.com							