

Program	OPEN-SOURCE INTELLIGENCE (OSINT)
FPJB	CYBER SECURITY AND DIGITAL INDUSTRY REVOLUTION CENTRE, UPNM
Coordinator	ASSOC. PROF. MOHD HAZALI BIN MOHAMED HALIP
Synopsis	In this course, you will be learning about Open-Source Intelligence (OSINT) by using tools accessible from publicly available sources. You will acquire the skills necessary to collect and analyse information efficiently from sources that is available publicly. The course concludes with an extensive hands-on practice in which the participant must utilise all the concepts and tools acquired during the course to analyse and fully characterize the various Open-Source Intelligence (OSINT) gathering information techniques and analytical processes.
Course Outcomes	Participant be able to: <ol style="list-style-type: none"> 1. Conduct online investigative research and data collection anonymously. 2. Explain, collect, and analyse data collected from social media platforms. 3. Demonstrate and differentiate tools utilised in OSINT work.
Mode of Delivery (Physical)	<ol style="list-style-type: none"> 1. Course will be conducted in class and computer lab. Methods of learning include lectures, class discussion, case studies and exercises. 2. Participant will apply various OSINT tools in collecting and analysing information.
Duration of Study	3 DAYS
Target Participant	Students, researchers, law enforcement officers, political analysts, and people who want to acquire knowledge in Open-Source Intelligence (OSINT).
Admission Requirement	Basic computer knowledge is required for this course. Participants should be comfortable with using the command line in Linux or Windows for a few labs and be familiar with security terminology.
Course Fee	RM4500.00/pax (min. 5 pax, max 10 pax)

COURSE OUTLINE	ACTIVITY	COURSE OUTCOME	ASSESSMENT
Day 1 1. Introduction to OSINT 2. Internet Engineering and Infrastructure 3. Operational Security 4. OSINT Search Engines	Lecture, Demos and Labs	<ul style="list-style-type: none"> Participants will establish a robust groundwork in Open-Source Intelligence (OSINT) and comprehend its fundamental significance in the realm of information gathering. They will also acquire expertise in internet engineering and infrastructure, master operational security practices, and hone their ability to efficiently utilize OSINT search engines for extracting valuable data from publicly accessible sources. 	Hands-On Labs Exercises
Day 2 1. Reverse Image Search Technique 2. Geolocation 3. Email Address & Phone Number 4. OSINT Social Networks 5. Dark Web and Cryptocurrency	Lecture, Demos and Labs	<ul style="list-style-type: none"> Participants will cultivate a versatile skill set encompassing proficiency in reverse image search techniques, geolocation investigations, email address and phone number analysis for OSINT purposes, effective utilization of social networks for information gathering, and adept navigation of the complexities of the dark web. These acquired skills will empower participants to excel across multiple facets of Open-Source Intelligence (OSINT) and elevate their investigative prowess. 	Hands-On Labs Exercises and Case Studies.
Day 3 1. Automated OSINT 2. OSINT with Practical: Real Life Examples	Lecture, Demos and Labs	<ul style="list-style-type: none"> Participants will develop expertise in utilizing automated tools to optimize efficiency in Open-Source Intelligence (OSINT) gathering. Participants will acquire practical OSINT skills and demonstrate the ability to effectively apply them in real-world scenarios. 	Hands-On Labs Exercises. Capture The Flag Exercise

Trainers:



Mohd Hazali Mohamed Halip is an Associate Professor in the Department of Computer Science at the National Defence University of Malaysia (UPNM). He was the Director of leads Cyber Security and Digital Industrial Revolution Centre, UPNM from 2016 to 2022. He was also the Head of Department for Computer Science and Deputy Dean for Faculty of Defence Science and Technology, UPNM. In the past he has held lecturer position at the National University of Malaysia prior to joining UPNM in 2007.

His academic and research interests focus on the areas of computer networking, information and cyber security and ethical hacking. He holds a BSc from University of Technology, Malaysia and MSc from Nottingham University, UK. He has attained CEH, ECSA, CSCU, Security+ and CCNA security professional certifications. He has attained CEH, ECSA, CSCU, Security+ and CCNA security professional certifications.



Nur Diyana Kamarudin is a Deputy Dean (Research and Postgraduate) in Faculty of Defence Science and Technology and Research Fellow in Cyber Security and Digital Industry Revolution Centre, National Defence University of Malaysia. She graduated from University Malaya with a bachelor's degree in Telecommunications Engineering and acquired a Postgraduate Diploma in Mobile and Satellite Communication from University of Surrey, United Kingdom. She did MSc in Electrical and Electronic Engineering at National Defence University of Malaysia and obtained her PhD at Universiti Teknologi Malaysia. She received numerous honours and recognitions, including Golden Talent Award, 2019, Young Academician Award, 2020, Excellent Service Award, 2021 and Gold Awards for many International Innovations Competition. Her research interests include (but not limited to) Image Processing, Artificial Intelligence, Secured IoT Ecosystem and OSINT. Nur Diyana serves as a Journal Reviewer for Web of Science Journals including IEEE Access and Scientific Reports.



Dr Syarifah Bahiyah Rahayu is a fellow researcher at Cyber Security and Digital Industry Revolution Centre, National Defence University Malaysia. Recently appointed as Head, Department of Defense Science under Faculty of Science and Technology Defense. She has vast experience in the IT industry and academia. Actively deliver talks, seminars and provide consultation related to cybersecurity and blockchain. Her research interests include (but not limited to) cybersecurity, OSINT, blockchain, machine learning and information/data science.



PROGRAM OUTLINE



Open-Source Intelligence (OSINT) Course

Training Schedule

Day 1	Topics	Duration
8.00 am – 8.30 am	Registration & Breakfast	30 mins
8.30 am – 9.30 am	Course Overview	1 hour
9.30 am – 10.30 am	Introduction to OSINT	1 hour
10.30 am – 11.30 am	Internet Engineering	1 hour
11.30 am – 12.30 pm	Internet Infrastructure	1 hour
12.30 pm – 2.30 pm	Lunch and Solat Break	2 hours
2.30 pm – 3.30 pm	Operational Security	1 hour
3.30 pm – 4.30 pm	Search Engine	1 hour
4.30 pm – 5.00 pm	Knowledge Check – End of Day 1	30 mins
TOTAL DURATION DAY 1		6 hours 30 mins



PROGRAM OUTLINE

Day 2	Topics	Duration
8.30 am – 9.00 am	Breakfast	30 mins
9.00 am – 9.30 am	Day 1 Recap	30 mins
9.30 am – 10.30 am	Email Address & Phone Number	1 hour
10.30 am – 11.30 am	Reverse Image Search Technique	1 hour
11.30 am – 12.30 pm	Geolocation	1 hour
12.30 pm – 2.30 pm	Lunch and Solat Break	2 hours
2.30 pm – 3.30 pm	Dark Web & Cryptocurrency	1 hour
3.30 pm – 4.30 pm	Social Networks	1 hour
4.30 pm – 5.00 pm	Knowledge Check – End of Day 2	30 mins
TOTAL DURATION DAY 2		6 hours
Day 3	Topics	Duration
8.30 am – 9.00 am	Breakfast	30 mins
9.00 am – 9.30 am	Day 2 Recap	30 mins
9.30 am – 11.30 am	Automation OSINT Tools	2 hours
11.30 am – 12.30 pm	Exercise (Automation OSINT Tools Part 1)	1 hour
12.30 pm – 2.30 pm	Lunch and Solat Break	2 hours
2.30 pm – 3.30 pm	Exercise (Automation OSINT Tools Part 2)	1 hour
3.30 pm – 4.30 pm	Discussion on Real Case Studies / Capture the Flag Exercise	1 hour
4.30 pm – 5.00 pm	Knowledge Check – End of Day 3	30 mins
TOTAL DURATION DAY 3		6 hours