

Cybersecurity Master Annual Program

2023



Warsaw New York Dubai Zug

info@cqure.pl

www.cqure.pl www.cqureacademy.com



About the program

The predictions show us that the demand for cybersecurity specialists will skyrocket in the upcoming years. The rate of growth for jobs in information security is increasing much faster than all other occupations. By 2023, it is projected that there will be more than 10 million new jobs opening in this industry – it is worrying that there will not be enough skilled professionals to feel this gap and that the criminals are not sleeping and constantly developing new ways to bypass the security measures. It's so important for cybersecurity specialists to constantly learn and acquire new skills. Of course, reading a book, watching a few minute-long video is useful but nothing can replace the interaction with an Expert who uses his knowledge in practice daily.

This mastery program is great for people that a restarting out in cybersecurity, or are a seasoned IT pro who wants to switch into cybersecurity. The "Cybersecurity Master Annual Program" is the perfect and complete learning path, it is designed as a continuous learning program that will keep the participants on top of the latest developments in this ever-changing industry. Every month, the students learn a new essential skill to become a cybersecurity Expert with the most up to date skills.

CMAP Formula

The Cybersecurity Master Annual Program, is a continuous learning program that provides the participants with insights for various cybersecurity skills. The program consists of 12 workshops (plus a bonus module), delivered by CQURE Academy Trainers. Each live workshop is demo-intensive and accompanied by pre-and post-workshop homeassignments to solidify your learning.

Each workshop touches upon a different area of cybersecurity. Workshops are live and take place on last Wednesday of each month, with the exception of December, when it will take place two weeks earlier (13th Dec) to avoid conflicting dates with any Christmas-related arrangements our students may have. A Discord Server will also be set-up for the students to receive continuous assistance and support from CQURE's Experts during the program.

The delivery is in EU time zones (CET/CEST). Each workshop will be complemented by **pre-work assignment** (some reading material that will help the students prepare for the workshop) and an additional home assignment (e.g., self-study exercises, additional reading materials, labs etc.) and a test.

All of the live workshops will be **recorded** and accessible for students any time – in case any of the customers need to attend some other duties/holidays or simply want to recap. In January 2024, the **Final Exam** will be performed in a form of a proctored examination – to take on this one, a student must have bought access to the whole program.



CMAP Curriculum

Skill	Module Title	Date	Instructor
1	Securing Windows Platform: W11 & WS22	25.01.2023	Mike Jankowski-Lorek, PhD
2	Hardening Active Directory Infrastructure	22.02.2023	Michael Grafnetter
3	Collecting and Analyzing Digital Evidence	29.03.2023	Paula Januszkiewicz
4	Implementing Secure Azure Active Directory	26.04.2023	Michael Grafnetter
5	Pentesting Web Applications	31.05.2023	Artur Kalinowski
6	Implementing Privileged Access Workstations	28.06.2023	Sami Laiho
7	Understanding Malware Analysis	26.07.2023	Paula Januszkiewicz
8	Mastering Authentication in .NET	30.08.2023	Przemek Tomasik
9	Configuring Application Whitelisting	27.09.2023	Sami Laiho
10	Empowering the PowerShell	25.10.2023	Michael Grafnetter
11	Mastering Monitoring Operations and Threat Intelligence	29.11.2023	Piotr Pawlik
12	Securing SQL Server	13.12.2023	Damian Widera

Additionally, we offer a Bonus Module **Building Secure Cluster Infrastructure in the Cloud!** If you decide to purchase the entirety of CMAP23 you will receive this Module **FREE OF CHARGE!**

Skill	Module Title	Date	Instructor
BONUS	Building Secure Cluster Infrastructure in the Cloud	14.06.2023	Michał Furmankiewicz

Module 1: Securing Windows Platform: Windows 11 & Windows Server 2022

<u>Date:</u> January 25th <u>Instructor:</u> Mike Jankowski-Lorek, PhD

- a) New features in Windows 11 and Windows Server 2022 affecting security
- b) Implementing rights, permissions and privileges
- c) Defining and disabling unnecessary services
- d) Implementing secure service accounts

Module 2: Hardening Active Directory Infrastructure

<u>Date:</u> February 22nd <u>Instructor:</u> Michael Grafnetter

- a) Modern Identity Attack Techniques
- b) Preventing Credential Theft and Misuse
- c) Recommended AD Configuration Options
- d) OS-Level Credential Protection Features: LSA Protected Process, Credential Guard, and RDP Restricted Admin Mode
- e) Detecting Backdoors in Active Directory



Module 3: Collecting and Analyzing Digital Evidence

<u>Date:</u> March 29th <u>Instructor:</u> Paula Januszkiewicz

- a) Evidence Gathering
- b) Memory: Dumping and Analysis
- c) Memory: Indicators of compromise
- d) Disk: dumping & analysis
- e) Disk: extracting and interpreting evidence

Module 4: Implementing Secure Azure Active Directory

<u>Date:</u> April 26th <u>Instructor:</u> Michael Grafnetter

- a) Azure AD security settings
- b) AAD Identity Protection
- c) AAD Privileged Identity Management (PIM)
- d) AAD Password Protection

Module 5: Pentesting Web Applications

<u>Date:</u> May 31st <u>Instructor:</u> Artur Kalinowski

- a) Cross Site Scripting
- b) Injections
- c) Insecure File Handling
- d) Testing API

Module 6: Implementing Privileged Access Workstations

Date: June 28th Instructor: Sami Laiho

- a) Privileged Access Workstations how and why?
- b) Different hardware and VM solutions for implementing PAWs
- c) Difference between normal and privileged access
- d) Implementing and Managing On-prem PAWs
- e) Implementing and Managing Cloud-service PAWs

Module 7: Understanding Malware Analysis

<u>Date:</u> July 26th <u>Instructor:</u> Paula Januszkiewicz

- a) Malicious non-exe files
- b) Introduction to Static Malware Analysis
- c) Behavioral Malware Analysis

Module 8: Mastering Authentication in .NET

<u>Date:</u> August 30th <u>Instructor:</u> Przemek Tomasik

- a) Implementing OAUTH 2
- b) Implementing OpenID Connect
- c) Implementing SAML

Module 9: Configuring Application Whitelisting

<u>Date:</u> September 27th <u>Instructor:</u> Sami Laiho

- a) Whitelisting in General
- b) Implementing AppLocker
- c) Managing AppLocker



d) Troubleshooting AppLocker

Module 10: Empowering the PowerShell

<u>Date:</u> October 25th <u>Instructor:</u> Michael Grafnetter

- a) PowerShell security and specific hacktools (like DSInternals)
- b) Advanced PowerShell course
- c) Auditing Active Directory using PowerShell

Module 11: Mastering Monitoring Operations and Threat Intelligence <u>Date:</u> November 29th <u>Instructor:</u> Piotr Pawlik

- a) Microsoft 365 security from SOC Analyst perspective
- b) Microsoft 365 Defender for Endpoint EDR story
- c) Detection and Response with Sentinel Let's attack Contoso network

Module 12: Securing SQL Server

<u>Date:</u> December 13th <u>Instructor:</u> Damian Widera

- a) SQL Server Security Baseline Concepts
- b) SQL Server Instance Security
- c) Managing Logins & Passwords

BONUS MODULE: Building Secure Cluster Infrastructure in the Cloud Date: June 14th Instructor: Michał Furmankiewicz

- a) Planning and designing the secure cluster infrastructure in Azure
- b) Securing DevOps pipeline for AKS
- c) Confidential computing with AKS





CMAP Teachers

Paula Januszkiewicz

FOUNDER AND CEO OF COURE



Paula Januszkiewicz is the Founder and CEO of CQURE Inc. and CQURE Academy. She is also Enterprise Security MVP, honorable Microsoft Regional Director for CEE and a world class cybersecurity expert, consulting Customers all around the world. In 2017, Paula graduated from Harvard Business School. She is a top speaker at conferences including Microsoft Ignite (she was rated No. 1 among 1,100 speakers at a conference with 26000 attendees), RSA (in 2017 in USA her two sessions were amongst the five hottest sessions), Black Hat 2018 USA or Gartner Security Summit. Her presentations gather thousands of people. In 2019, Paula's presentation was voted best of Black Hat Asia 2019 Briefings!

Paula has 17 years of experience in the cybersecurity field, performing penetration tests, architecture consulting, trainings and seminars. Every year, before the pandemic, she took over 215 flights to provide security services, now she delivers tons of projects online. Paula also creates security awareness programs for various organizations, including awareness sessions for top management. Paula is a member of the Technical Advisory Board at Royal Bank of Scotland – helping to keep its security at the highest level possible! What is more, Paula has access to the source code of Windows!

Mike Jankowski-Lorek, PhD

DIRECTOR OF CONSULTING, CYBERSECURITY EXPERT

Dr. Mike Jankowski-Lorek is a solution architect, developer, data scientist and security expert with more than 17-years' experience in the field. He designs and implements solutions for Databases, Network & Management area, mainly for Microsoft platform for medium to enterprise level organizations. Mike holds multiple certifications, especially security, database and software development related. As a passionate person he loves sharing his knowledge. Since 2007 he has been closely cooperating with Polish-Japanese Academy of Information Technology in Warsaw, teaching security, database and data mining related subjects.

Dr. Mike is additionally interested in Big data, High Availability and real time analytics especially when combined with machine learning and AI or

natural language processing. He holds a PhD in computer science and is already an author of multiple scientific publications, including a chapter in "Encyclopedia of Social Network Analysis and Mining" published by Springer. He has appeared at many well-known cybersecurity conferences worlwide such as RSA USA, RSA Asia Pacific & Japan and NT Konferenca Slovenia – or with the CQURE Team – at Black Hat Black Hat USA, Black Hat Europe, Black Hat Asia.



Michael Grafnetter

IDENTITY, CLOUD & SECURITY ARCHITECT, MVP



Michael is an expert on Active Directory security who works as a consultant, trainer, and researcher. He is best known as the author of the open-source Directory Services Internals (DSInternals) PowerShell module and Thycotic Weak Password Finder, tools used by security auditors and penetration testers worldwide. He is a Microsoft MVP and holds a master's degree in Software Engineering. Michael has spoken at many conferences, including Black Hat Europe, HipConf New York, SecTor Toronto, and BSides Lisbon.

Sami Laiho
WINDOWS OS EXPERT, MVP

Sami Laiho is one of the world's leading professionals in the Windows OS. Sami has been working with and teaching OS troubleshooting, management and security for more than 15 years. Sami's session was evaluated as the best session in TechEd North America 2014, TechEd Europe 2014 and TechEd Australia 2013. Sami's session at Ignite 2015 was evaluated as #2 out of 1000+ sessions and all of his four sessions were in the top 15 sessions on the Windows track.



Przemek Tomasik

CYBERSECURITY EXPERT



Przemysław Tomasik is a CQURE Cybersecurity Expert with over 15 years of experience in IT, focusing the last decade on security and compliance aspects. He has worked for financial, e-commerce, and hospitality industry in Fortune 500 companies. In 2017, he opened a new chapter in his IT career – educating IT Pros in security. He conducts training in an interesting and accessible way, focusing on current trends and using his solid knowledge, especially on secure coding techniques. Przemek has delivered many penetration tests scoped from web applications to infrastructure, configuration and code review. He has years of practical experience in vulnerability management on Enterprise level. As a

Cybersecurity Expert he is also responsible for security advisory and architecture review in a variety of projects. Przemek has recently started the OSCP certification to sharpen his skills.



Piotr Pawlik

CYBERSECURITY EXPERT, MVP



Piotr Pawlik is CQURE's Cybersecurity Expert, System Engineer and Unified Communications Expert with experience in design, implementation, and support for Microsoft solutions. During his work for Orange Business Services, Piotr was responsible for planning and deployment of security solutions for the biggest customers in Poland (insurance, banking, education and government sectors) and many customers located in Europe. Piotr's main areas of expertise are: Microsoft Private Cloud (Hyper-V virtualization and System Center 2012), Microsoft Public Cloud (Office 365 and Azure), Microsoft Exchange Server 2010/2013, Lync Server 2010/2013, Office Communications Servers and Windows Server family. His additional experience includes disaster recovery, capacity planning, virtualization

and business continuity. Excellent problem-solving skills and interpersonal skills.

Artur Kalinowski

CYBERSECURITY EXPERT

During almost 20 years of his IT career Artur developed his skills in cybersecurity from different perspectives. His experience ranges from a forensic analytics and a university lecturer to a security administrator. Artur worked for government, financial institutions and for global cybersecurity companies. He is an active member of Institute of Computer Forensics Association and an author of the book "Methods of surveillance and elements of computer forensics". His passion is music. Artur is playing keyboard instruments and creates music with the use of software FL Studio. He likes reading about myths, legends and conspiracy theories.



www.cqure.pl



Damian Widera

SOFTWARE ENGINEER, TRAINER, DATA PLATFORM MVP

Software engineer with over 20 years of professional experience in all aspects of data platform development. He has participated in a number of projects in international environments and possesses practical knowledge of procedures and tools which are necessary for successful implementation of such projects. Damian currently focuses on building solutions based on Microsoft Azure environment including complex database driven systems, machine learning, big data processing, tuning and optimization. As an experienced trainer, speaker and columnist, he is always eager to take part in new engagements. In 2022, for the 14th time, he has been awarded Microsoft's Data Platform MVP. In addition, he holds various Microsoft Certifications since 2004: Microsoft Certified



Trainer, Solution Developer and Application Developer for .NET, Database Administrator, Microsoft Certified Solutions Expert.



SOFTWARE ENGINEER, FORMER MVP



Experienced professional (with 15+ years in business) working in various roles as a consultant, architect and team leader, keen on problem-solving and business enablement through technology. Michal has spent the last 10 years working with various Cloud technologies on the market helping customers to understand the broader concept, build solutions and get the business outcome. He's very goal oriented and passionate about making things happen including whoever is required to make the job done.



Frequently Asked Questions

What happens if I sign up for the program in May, will I be able to access the previous modules? Yes, you can sign up at your preferred time and you will get access to all the materials and course recordings from the previous months.

If I sign up just for one skill, will I have the access to the discord channel?

Yes, there will be a different discord channel for each of the modules.

If I sign up for one skill, can I access the next module?

All of the skills are purchased separately, if you decide to sign up for one skill then you can always buy an access to any additional one to boost your knowledge.

If I sign up for one workshop and decide that I would like to take the whole program afterwards, will I be charged the full price?

You will not be charged for the module that you have already for, only for the difference.

Is the exam at the end obligatory?

The final exam is not mandatory and you will receive a certificate of completion without it; however with passing the exam your certification will be higher and you will receive the Cybersecurity Master certificate.

Do I need to have any entry knowledge before signing up for the CMAP?

Basic understanding of the IT technologies is something that you should have; however all the skills come witYes, we will be releasing the new program next year – all the skills will be updated with the latest h pre-work materials that will level the participants knowledge before taking part in each module.

How does the delivery of each skill look like?

Firstly, you receive the pre-work materials on the subject that will help you with the understanding of the live workshop that comes afterwards. The live workshop will be delivered on the Zoom platform and it will last 8 hours, including breaks. After the workshop concludes, you will receive the post-work materials/ assignments along with a test. You will also be granted access to a dedicated Discord channel.

Can I buy the whole CMAP program and share the skills among my colleagues?

The CMAP program can only be accessed per person, and the access to the individual skills cannot be shared or distributed across other people.

Will there be a new CMAP 2024 program next year?

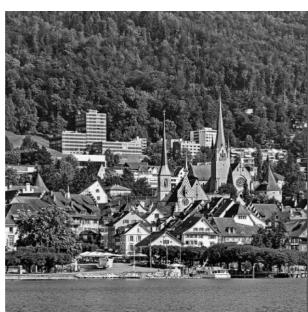
The program's agenda will be similar to CMAP 2023 – however all the sessions will run live again, and any technology upgrades will be included.

Any additional questions? Please send us an email to trainings@cqureacademy.com











CQURE

Warsaw New York Dubai Zug

info@cqure.pl

www.cqure.pl www.cqureacademy.com

