Course Outline

Annual International Training Course

1. Course Title: "Intensive Cybersecurity Bootcamp"

2. Duration:

A duration of 10 days from 8-19 June 2026.

3. Background:

Thailand International Cooperation Agency (TICA)

TICA is a national focal point for Thailand's international development cooperation. It was established in 2004 to realize Thailand's aspiration to be a contributor to international development cooperation. Believing that global challenges are best addressed through international cooperation and global partnership, TICA continues to work closely together with its development partners to realize the global development agenda through various capacity-building and human resources development programmes. In response to the recent changes in the global landscape of development cooperation, TICA has strengthened its partnerships to harness the synergy of South-South and Triangular Cooperation to tackle global development challenges, including expediting the implementation of Sustainable Development Goals (SDGs). It also continues to realign our focuses in order to deliver Thailand's commitments as a global reliable partner.

Since 1991, TICA, in collaboration with educational institutions in Thailand, has offered short-term training courses under its Annual International Training Course (AITC) programme. The number of courses offered each year varies between 25 to 35 courses for 20-35 participants per course. AITC not only fosters good and friendly relations which Thailand has already enjoyed with recipient countries across regions, but also helps Thailand to reach out to those countries with which we desire to engage more closely. The courses offered by TICA in 2023-2025 are categorized into 5 themes: Sufficiency Economy Philosophy (SEP), food security, climate change and environmental issues, public health, BCG Model related.

4. **Objectives:**

The program is designed to:

- Understand the fundamentals of information security based on the CompTIA Security+ framework.
- Analyze and identify cyber threats using the principles from the Certified Ethical Hacker (CEH).
- Apply security governance and management concepts aligned with CISSP domains.
- Prepare effectively for globally recognized certifications.
- Apply the knowledge to real-world organizational contexts.

5. **Course Contents:**

To achieve the objectives, the following contents will be provided.

- Introduction to Cybersecurity & Security+ Core Concepts
- Network Security and Access Control (Security+ Focus)
- Cryptography and Identity Management
- Vulnerability Assessment & Tools (PenTest+ Focus)
- Exploitation and Web Attacks (PenTest+ Focus)
- Reporting and Mitigation in Pentesting
- CISSP Domain 1–2: Security & Risk Management / Asset Security
- CISSP Domain 3–4: Security Architecture / Network Security
- Incident Response & Business Continuity
- Cross-Domain Theoretical Integration (Theoretical Deep Dive)

6. **Participants' Criteria**:

Applicants must fulfill the following requirements:

- Be nominated by their respective governments;
- Education: graduated in IT, Cybersecurity or related areas or have experience in IT or Cybersecurity;
- Language: proficiency in English (speaking, reading and writing)

7. **Attendance and Evaluation**

Participants who complete the course will receive a certificate tentatively based on:

- Class attendance
- Class participation and discussion
- Presentation and report
- Written form of evaluation

8. Venue:

The course will be held at the Faculty of Information Technology and Digital Innovation, King Mongkut's University of Technology North Bangkok.

9. Expected Results:

Participants who complete this training Course are expected to:

- Clearly explain core concepts in information security.
- Understand key cyberattack techniques and their countermeasures.
- Identify risks, assess potential impacts, and recommend appropriate controls.
- Apply the acquired knowledge to manage real-world systems securely.

10. Organization/ Institution:

Implementing Agency:

Faculty of Information Technology and Digital Innovation, King Mongkut's University of Technology North Bangkok

Contact Person:

- Asst.Prof.Dr. sakchai tangwannawit - sakchai.t@itd.kmutnb.ac.th
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11. Expenditure/Funding:

Thailand International Cooperation Agency (TICA)
Government Complex, Building B (South Zone), 8th Floor,
Chaengwattana Rd. Laksi District, Bangkok 10210 THAILAND
Website: https://tica-thaigov.mfa.go.th/en/index
Email: aitc@mfa.go.th

Faculty of Information Technology and Digital Innovation, KMUTNB

Established in 1996, the Faculty of Information Technology and Digital Innovation, King Mongkut's University of Technology North Bangkok has been a provider of tertiary education in undergraduate and post-graduate levels. Our missions include producing workforce for digital industries, conducting research and developing innovation based on digital technology, and enhancing society through reskilling and upskilling services.

The faculty offers various international and Thai programs within the areas of computer science and information technology including:

- Bachelor of Science Program in Informatics for Digital Economy (International Program)
- Master of Science Program in Information and Data Science (International Program)
- Doctor of Philosophy Program in Information and Data Science (International Program)
- Master of Science Program in Data Science for Innovation (Thai Program)
- Doctor of Philosophy Program in Data Science for Innovation (Thai Program)
- Master of Science Program in Management Information Systems (Thai Program)
- Doctor of Philosophy Program in Management Information Systems (Thai Program)
- Master of Science Program in Digital Network and Information Security Management (Thai Program)
- Doctor of Philosophy Program in Network and Information Security Management (Thai Program)

The faculty has its long standing in producing ICT workforce for over 20 years. Our alumni have been involved in both industrial and government sections, including several academic institutions.

Schedule for the Training Programme: "Intensive Cybersecurity Bootcamp"

Date/ Period /Topic	Time (Thailand time)	Content	Speaker
Day 1: 8 June 2026			
	08.45-09.00 a.m.	Opening ceremony	
Introduction to Cybersecurity & Security+ Core Concepts	09.00-10.50 a.m.	Lecture • Definition of cybersecurity and types of cyber threats (Threat Landscape). • CIA Triad: Confidentiality, Integrity, Availability.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	10.50-11.00 a.m.	Break	
	11.00-12.30 p.m.	Lecture • CIA Triad: Confidentiality, Integrity, Availability.	
	12.30-1.30 p.m.	Lunch Break	
	1.30-3.20 p.m.	Lecture • Security governance, policies, and basic security frameworks. • Types of threats: Malware, Social Engineering, Insider Threats.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	3.20-3.30 p.m.	Break	
	3.30-5.00 p.m.	Lecture • Categories of security controls: Administrative, Technical, Physical.	

Date/ Period /Topic	Time (Thailand time)	Content	Speaker
Day 2: 9 June 2026			
Network Security and Access Control	09.00-10.50 a.m.	Lecture • Network fundamentals and TCP/IP model.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	10.50-11.00 a.m.	Break	
	11.00-12.30 p.m.	Lecture • Key components of network security: Firewall, IDS/IPS, NAC.	
	12.30-1.30 p.m.	Lunch Break	
	1.30-3.20 p.m.	Lecture • Secure communication protocols: HTTPS, SSH, IPsec, TLS.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	3.20-3.30 p.m.	Break	
	3.30-5.00 p.m.	Lecture • Concepts of VLAN, DMZ, and Network Segmentation • Authentication, Authorization, and Accounting (AAA Model).	

Date/ Period /Topic	Time (Thailand time)	Content	Speaker
Day 3: 10 June 2026			
Cryptography and Identity Management	09.00-10.50 a.m.	Lecture • Symmetric vs. Asymmetric encryption.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	10.50-11.00 a.m.	Break	
	11.00-12.30 p.m.	Lecture • Hashing algorithms: MD5, SHA, HMAC.	
	12.30-1.30 p.m.	Lunch Break	
	1.30-3.20 p.m.	Lecture • Key management and Certificate Authority (CA). • Public Key Infrastructure (PKI) and Digital Signatures.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	3.20-3.30 p.m.	Break	
	3.30-5.00 p.m.	Lecture • Multi-Factor Authentication (MFA), SSO, and Federation concepts.	

Date/ Period /Topic	Time (Thailand time)	Content	Speaker
Day 4: 11 June 2026			
Vulnerability Assessment & Tools	09.00-10.50 a.m.	Lecture • Vulnerability management lifecycle.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	10.50-11.00 a.m.	Break	
	11.00-12.30 p.m.	Lecture • Hands-on with tools: Nessus, OpenVAS, Nmap, Nikto.	
	12.30-1.30 p.m.	Lunch Break	
	1.30-3.20 p.m.	Lecture • Reconnaissance techniques: Passive vs. Active. • Network scanning techniques: Ping Sweep, Port Scanning, Banner Grabbing.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	3.20-3.30 p.m.	Break	
	3.30-5.00 p.m.	Lecture • Vulnerability reporting and risk scoring (CVSS).	

Date/ Period /Topic	Time (Thailand time)	Content	Speaker
Day 5: 12 June 2026			
Exploitation and Web Attacks	09.00-10.50 a.m.	Lecture • OWASP Top 10 vulnerabilities: XSS, SQL Injection, CSRF, Broken Access Control.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	10.50-11.00 a.m.	Break	
	11.00-12.30 p.m.	Lecture • System attack techniques: Buffer Overflow, Brute Force, MITM.	
	12.30-1.30 p.m.	Lunch Break	
	1.30-3.20 p.m.	Lecture • Privilege escalation and post-exploitation techniques.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	3.20-3.30 p.m.	Break	
	3.30-5.00 p.m.	Lecture • Social engineering tools: SET, Phishing Kits. • Using Metasploit Framework for exploitation.	

Date/ Period /Topic	Time (Thailand time)	Content	Speaker
Day 6: 15 June 2026			
Reporting and Mitigation in Pentesting	09.00-10.50 a.m.	Lecture • Rules of Engagement (ROE) and scope definition.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	10.50-11.00 a.m.	Break	
	11.00-12.30 p.m.	Lecture • Types of pentest reports: Executive vs. Technical.	
	12.30-1.30 p.m.	Lunch Break	
	1.30-3.20 p.m.	Lecture • Communicating findings to stakeholders.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	3.20-3.30 p.m.	Break	
	3.30-5.00 p.m.	Lecture • Mitigation strategies and best practices. • Prioritizing vulnerabilities based on organizational risk.	

Date/ Period /Topic	Time (Thailand time)	Content	Speaker
Day 7: 16 June 2026			
Security & Risk Management / Asset Security	09.00-10.50 a.m.	Lecture • Risk management process.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	10.50-11.00 a.m.	Break	
	11.00-12.30 p.m.	Lecture • Security governance, compliance, and legal frameworks (e.g., GDPR, PDPA).	
	12.30-1.30 p.m.	Lunch Break	
	1.30-3.20 p.m.	Lecture • Security policies, standards, procedures, and guidelines. • Data classification and access control.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	3.20-3.30 p.m.	Break	
	3.30-5.00 p.m.	Lecture • Privacy protection, data ownership, and data handling policies.	

Date/ Period /Topic	Time (Thailand time)	Content	Speaker
Day 8: 17 June 2026			
Security Architecture / Network Security	09.00-10.50 a.m.	Lecture • Security models: Bell-LaPadula, Biba, Clark-Wilson, Brewer-Nash.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	10.50-11.00 a.m.	Break	
	11.00-12.30 p.m.	Lecture • Secure system design principles: Least Privilege, Defense in Depth.	
	12.30-1.30 p.m.	Lunch Break	
	1.30-3.20 p.m.	Lecture • Network security architecture: Perimeter, Zoning, DMZ, VPN.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	3.20-3.30 p.m.	Break	
	3.30-5.00 p.m.	Lecture • Secure protocols: IPsec, TLS, SNMPv3. • Threat modeling methodologies: STRIDE, DREAD, PASTA.	

Date/ Period /Topic	Time (Thailand time)	Content	Speaker
Day 9: 18 June 2026			
Incident Response & Business Continuity	09.00-10.50 a.m.	Lecture • Incident response process: Preparation, Detection, Response, Recovery.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	10.50-11.00 a.m.	Break	
	11.00-12.30 p.m.	Lecture • Introduction to SIEM systems and log monitoring.	
	12.30-1.30 p.m.	Lunch Break	
	1.30-3.20 p.m.	Lecture • Basics of digital forensics: Chain of Custody, Evidence Collection. • Business Continuity Planning (BCP) and Disaster Recovery Planning (DRP).	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	3.20-3.30 p.m.	Break	
	3.30-5.00 p.m.	Lecture • Business Impact Analysis (BIA).	

Date/ Period /Topic	Time (Thailand time)	Content	Speaker
Day 10: 19 June 2026			
Cross-Domain Theoretical Integration	09.00-10.50 a.m.	Lecture • Integration of security controls: Preventive, Detective, Corrective.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	10.50-11.00 a.m.	Break	
	11.00-12.30 p.m.	Lecture • Zero Trust Architecture and Defense-in-Depth principles.	
	12.30-1.30 p.m.	Lunch Break	
	1.30-3.20 p.m.	Lecture • Resource prioritization and enterprise risk management.	Lecture from ITD (Information Technology and Digital Innovation) Faculty, KMUTNB
	3.20-3.30 p.m.	Break	
	3.30-5.00 p.m.	Lecture • Secure System Development Lifecycle (SSDLC). • Security best practices for public and private sector organizations.	