MAWA EVENTS

Address: No. 857, Block A2. Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

Phone: +601116373203 | **Email:** info@mawaevents.net

CYBER SECURITY FUNDAMENTALS FOR HEALTHCARE INDUSTRY

""Protecting Patient Data, Critical Systems, and Operational Continuity in a Digital Health Era""

Schedule

Date	Venue	Fees (Face-to-Face)
02 – 06 Mar 2026	Dubai, UAE	USD 3495 per delegate

Introduction

The healthcare industry is increasingly dependent on digital systems—from electronic medical records to connected diagnostic devices and telemedicine platforms. With this digital growth comes an escalating threat from cyberattacks targeting patient data, critical infrastructure, and clinical operations.

This intensive five-day course equips IT, security, and healthcare professionals with the foundational knowledge and tools to identify cyber risks, implement protection strategies, and respond to incidents. Tailored to the unique challenges of healthcare, the program covers regulatory frameworks, threat landscapes, network security, and best practices in securing sensitive health information.

Objectives

By the end of this course, participants will be able to:

- Understand the specific cyber threats facing the healthcare sector.
- Protect electronic health records (EHR) and personal health information (PHI).
- Apply security controls and policies aligned with healthcare regulations (e.g., HIPAA, GDPR).
- Implement cybersecurity frameworks such as NIST CSF and ISO 27001.
- Detect and respond to incidents using real-time tools and processes.
- Promote cyber hygiene across clinical, technical, and administrative teams.

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Why Attend

- Learn to defend healthcare systems and patient data from targeted cyberattacks.
- Understand regulatory and legal implications of breaches in healthcare.
- Strengthen your ability to implement preventive and responsive measures.
- Build collaboration between IT, compliance, and healthcare operations.
- Prepare for audits, certifications, and incident response scenarios.

Target Audience

This program is designed for:

- Healthcare IT and cybersecurity professionals
- Information security officers and data protection officers (DPOs)
- Compliance, governance, and quality managers
- Hospital administrators and clinical system users
- Consultants supporting digital health and infrastructure security

Individual Benefits

Key competencies that will be developed include:

- Cyber threat detection and risk assessment
- Healthcare-specific data protection strategies
- Network security and endpoint management
- Incident response planning and containment
- Cross-functional cybersecurity communication

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Improved protection of patient and organizational data
- Reduced risk of ransomware, phishing, and data breaches
- Better compliance with industry regulations and security standards
- Enhanced resilience of critical healthcare systems and operations
- Stronger cybersecurity awareness among healthcare teams

Instructional Methodology

The course follows a blended learning approach combining theory with practice:

- Case Studies – High-profile healthcare cyber incidents
- Workshops – Risk mapping, breach simulation, response planning
- Templates – Security policy samples, audit checklists, incident response plans
- Group Activities – Threat modeling and tabletop exercises
- Tools – Introduction to open-source and commercial security platforms
- Expert Coaching – Regulatory alignment, strategy development, and improvement

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Course Outline

Training Hours: 7:30 AM – 3:30 PM

Daily Format : 3–4 Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

Day 1: Healthcare Threat Landscape and Regulatory Foundations

- **Module 1: Introduction to Healthcare Cybersecurity (07:30 – 09:30)**
- What makes healthcare a unique target
- Trends in attacks on hospitals and medical systems
- Cost and impact of data breaches
- **Module 2: Regulatory and Legal Compliance (09:45 – 11:15)**
- HIPAA, GDPR, local regulations
- Security and privacy obligations
- Penalties, enforcement, and patient rights
- **Module 3: Risk Assessment in Healthcare (11:30 – 01:00)**
- Identifying digital assets and vulnerabilities
- Assessing likelihood, impact, and risk levels
- Third-party and supply chain risk
- **Module 4: Workshop – Healthcare Risk Register Development (02:00 – 03:30)**
- Participants create and prioritize cyber risk items for a sample hospital

Day 2: Core Cybersecurity Controls and Network Defense

- **Module 5: Identity and Access Management (07:30 – 09:30)**
- Role-based access controls (RBAC)
- Multi-factor authentication (MFA)
- Managing user accounts and privilege escalation
- **Module 6: Endpoint and Device Security (09:45 – 11:15)**
- Securing medical devices and IoT endpoints
- Antivirus, patch management, and encryption
- BYOD policy and mobile device control
- **Module 7: Network Security and Segmentation (11:30 – 01:00)**
- Firewalls, IDS/IPS, and segmentation strategies
- VPNs and secure remote access
- Monitoring and traffic analysis
- **Module 8: Simulation – Network Intrusion Response (02:00 – 03:30)**
- Group exercise to detect and respond to a simulated intrusion

Day 3: Data Protection and Application Security

- **Module 9: Data Classification and Protection (07:30 – 09:30)**
- PHI vs. PII vs. general data
- Backup and recovery planning
- Encryption at rest and in transit
- **Module 10: Email and Web Application Security (09:45 – 11:15)**
- Phishing, ransomware, and social engineering
- Email filtering, sandboxing, and URL protection
- Web app vulnerabilities (OWASP Top 10)
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Module 11: EHR and Clinical System Security (11:30 – 01:00)

- Securing EHR platforms and hospital systems
- Audit trails and role separation
- Interoperability and secure API use
- **Module 12: Tabletop Exercise – Phishing and Ransomware Incident (02:00 – 03:30)**
- Teams develop containment and communication plan

Day 4: Cybersecurity Frameworks and Resilience Planning

- **Module 13: Cybersecurity Frameworks (07:30 – 09:30)**
- NIST Cybersecurity Framework
- ISO 27001, COBIT, and HITRUST
- Adapting frameworks to healthcare workflows
- **Module 14: Incident Response and Crisis Management (09:45 – 11:15)**
- Incident response planning and escalation
- Cyber crisis communication and media management
- Reporting obligations and coordination with authorities
- **Module 15: Business Continuity and Disaster Recovery (11:30 – 01:00)**
- Linking cybersecurity to BCP and DRP
- System recovery prioritization
- Drills and readiness testing
- **Module 16: Simulation – Building a Healthcare IR Plan (02:00 – 03:30)**
- Teams create and present their customized IR plan

Day 5: Cyber Culture, Governance, and Final Strategy

- **Module 17: Cybersecurity Governance in Healthcare (07:30 – 09:30)**
- Roles and responsibilities
- Metrics, dashboards, and executive reporting
- Policy lifecycle management
- **Module 18: Human Factors and Cyber Awareness (09:45 – 11:15)**
- Insider threats, awareness training, and simulations
- Designing effective awareness campaigns
- Behavior monitoring and support systems
- **Module 19: Final Case Review and Risk Reduction Strategy (11:30 – 01:00)**
- Analyze a real-world breach and propose alternative actions
- Build a multi-layered defense strategy
- **Module 20: Wrap-Up, Q&A, and Certification Briefing (02:00 – 03:30)**
- Group reflection, course feedback, and final action plans

Certification

CERTIFICATION

Participants who complete the program will receive a **Certificate of Completion in Cybersecurity Fundamentals for Healthcare Industry** , recognizing their ability to protect sensitive healthcare systems and data using sector-specific cyber risk practices.

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Why Choose MAWA Events

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In-House / Customized Training Interested in running this course for your team? Please contact us:	TEL: **+601116373203**	EMAIL: **info@mawaevents.net**