5th COMSATS-ISESCO-INIT

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International Workshop on "Internet Security: Enhancing Information Exchange Safeguards"
organized in collaboration with SESRIC

September 14-18, 2015
Ankara, Turkey

<u>Agenda/Topics to be covered during the workshop</u>

ORGANIZATIONAL SECURITY

- Organizational Security and Industry Standards
- Information Security Policies, Objectives and Procedures
- ISO 27001 ISMS Standard and related 'Security Controls'
- Risk Assessment – Methodology, Identification, Assessment and Treatment
- Practical exercises on:

    - ISMS Policy/Procedures Writing
    - Information Assets Identifications
    - Risk Assessment
    - Risk Treatment (ISO 27001 Control Implementation)
    - Statement of Applicability
    - Business Continuity Planning

CRYPTOGRAPHY AND NETWORK SECURITY

- Cloud Computing: A Paradigm Shift
- Security Risks and Threats of Cloud Computing
- Organization's Cloud Security Concerns
- Symmetric Key vs. Asymmetric Key Cryptography
- Block Ciphers vs. Stream Ciphers
- Hash Functions
- Digital Signatures
- Practical Application: Kerberos
- Practical Application: Secure Electronic Transaction

ETHICAL HACKING

- Introduction to Ethical Hacking and Penetration Testing
- Enumerating Windows Users
- Enumerating Open Ports
- Enumerating Running Services
- Introduction to Metasploit
- Hacking Windows Operating Systems
- Using Encoders to bypass Antivirus and Firewalls
- Cracking WEP

- Cracking WPA
- Cracking WPA2

CYBER SECURITY AND INFORMATION SECURITY DESIGN PRINCIPLES

- Introduction to Information Security Design Principles
- Emerging Cyber Threats and their Significance
- Dissecting a Cyber Attack
- Various Phases in Planning a Cyber Attack
- Recent Distributed Denial of Service Attacks
- Possible Mitigation Solutions to Service Attacks

SECURITY INFORMATION AND EVENT MANAGEMENT SYSTEMS

- Capturing Insecure Passwords (http)
- Capturing Secure Passwords (https): Gmail, Hotmail, Facebook
- Cracking Windows Systems Passwords
- Installation and Configuration Procedure
- OSSIM Dashboard
- Integration with Snare
- Integration with Nessus
- Discussion on Prevention Methods
- Discussion on Research and Development

DIGITAL FORENSICS

- Introduction to Digital Forensics
- Key Technical Concepts
- Digital Forensics Procedures
- Digital Forensics Tools
- Collecting Evidence
- Windows Systems Artifacts
- Internet and Email Forensics
- Network Forensics
- Exercises on different topics