



OSDIFE
Osservatorio Sicurezza e
Difesa CBRNe



UNIVERSITA' DELLA REPUBBLICA DI
SAN MARINO
Centro Universitario per la Formazione sulla
Sicurezza



**UNIVERSITA' DI ROMA "TOR
VERGATA"**
Dipartimento di Ingegneria Elettronica

INTERNATIONAL COURSE

"CBRNe & Cyber Security"

Rome, 16th-17th June 2017

The Observatory on Security and CBRNe Defence (OSDIFE), the University of Rome "Tor Vergata" – Department of Electronic Engineering (DIE) and the University of the Republic of San Marino – Center for Security Training and Education are pleased to present the International Course "CBRNe & Cyber Security".

Introduction

The Course has the aim to provide learners with an overview of ICT Security and concepts that need to be considered to understand the effects of Cyber events involving CBRNe agents, tools and facilities. In particular, the purpose of the Course is to raise awareness among participants about the current Cyber Attack issues toward CBRNe Critical Infrastructures and to develop practical skills in developing internal ICT defence strategies, recommendations and procedures.

To achieve this goal, during the Course there will be touched the following topics:

- Definition of general notions of ICT Security, with particular attention to CBRNe Infrastructures;
- Classification of Cyber Attacks and other attacks related to ICT Security;
- Analysis of the latest Cyber Attacks;
- The most advanced defence approaches and potential vulnerabilities;
- Analysis of tools and acquisition methods, penetration test methodologies, attack identification techniques, malware types, etc.;
- ICT Security Management, defence techniques and digital forensics;
- Analysis of the most common Cyber Security best practices.

Targets

The Course is mainly addressed to the following professionals:

- Cyber Security Manager
- Security Manager
- Military and Civil Experts, Specialists and Technicians.

Contents

Module 1: Asymmetric Threat and Technology

- CBRN Critical Infrastructure and Cyber Security
- New Asymmetric Risk Scenarios
- Terrorism and New Technologies

Module 2: CISO vs Hacker



OSDIFE
Osservatorio Sicurezza e
Difesa CBRNe



UNIVERSITA' DELLA REPUBBLICA DI
SAN MARINO
Centro Universitario per la Formazione sulla
Sicurezza



UNIVERSITA' DI ROMA "TOR
VERGATA"
Dipartimento di Ingegneria Elettronica

- Cyber security management (Defender in SMI).
- Attacker (a single attacker vs small team of attackers).
- Military Approach.

Module 3: Analysis of the Major Cyber Events

- Analysis of the major Cyber Events
- Analysis of the effects of the Cyber Attacks
- Lesson Learned

Module 4: CBRNe Infrastructures exposed to Cyber Attacks

- Analysis of the most vulnerable structures
- Vulnerable software and devices

Module 5: Malicious Actors

- Malicious Actors
- Nation States
- Corporations
- Terrorists
- Hacktivists and Cyber Terrorists

Module 6: Computer and Network Security

- Computer Security vs Network Security
- Major vulnerabilities in ICS
- Software security
- Network layers
- Types of Cyber Attack
- Vulnerabilities in the Architecture
- Intrusion Detection
- Vulnerability Cycle
- System Restor: Pros and Cons
- Best practices in ICS Cyber Security
- Costs

Module 7: Measures of Physical Cyber Security

- Physical Cyber Security
- Physical Security and Cyber Security
- Physical Protection Tools

Module 8: Ethics and Conclusion

- Privacy vs Confidentiality



OSDIFE
Osservatorio Sicurezza e
Difesa CBRNe



UNIVERSITA' DELLA REPUBBLICA DI
SAN MARINO
Centro Universitario per la Formazione sulla
Sicurezza



UNIVERSITA' DI ROMA "TOR
VERGATA"
Dipartimento di Ingegneria Elettronica

- Ethics vs Anti-Terrorism
- Solutions and mitigation measures

Duration and Place

The Course provides 36 hours of theoretical lessons and practical activities, of which 16 of frontal lessons and 20 for individual studies:

- 16th June from 9.00 to 18.00
- 17th June from 9.00 to 18.00

Faculty

Course Director: Prof. Roberto Mugavero
Cyber Security Professionals

Details on the Course

1. The Course, **that will be held in English language**, allows a maximum of 20 participants. To enroll, you have to send to the e-mail address info@osdife.org your CV. The selection of the participants will be carried out by the unquestionable judgment of the Observatory on CBRNe Security and Defence, according to the specific professional requirements, skills, competences and experience of the candidates.
2. The outcome of the preselection will be communicated by the Organizational Secretariat of the OSDIFE Course that will send the registration form.
3. The attendance fee will be paid in one single installment as a registration fee that amounts at 350,00 Euros (Three Hundred and Fifty/00). A discount of the 20% can be applied to the members/structures agreed upon OSDIFE.
4. The registration fee will be refunded just in case the course is not activated. The learners will be informed that the course has not been activated within seven days prior to the beginning of the teaching activities.
5. For the effective enrolment to the course, there are necessary the date of the transfer proving the payment to OSDIFE and the submission of the Registration Form.
6. The candidates admitted to the Course will receive a specific e-mail of "confirmation" at the e-mail address specified in the Registration Form.
7. The Certificate of Attendance will be integrated by a Course program that will specify the activities of the Course. Due to this document, it will be possible to ask the update of the Professional/Service Curriculum to the Entities that they belong.
8. Course Director: Prof. Roberto Mugavero – Scientific Director: Dr. Eng. Valentina Sabato
9. For further information, please visit the website www.osdife.org, write an e-mail to info@osdife.org or call to the number 06/72597278.
10. If there is something not specified in this information document, it will be applied the relevant legislation.
11. The Court of Rome is competent for any disputes.



OSDIFE

**Osservatorio Sicurezza e
Difesa CBRNe**



UNIVERSITA' DELLA REPUBBLICA DI
SAN MARINO
Centro Universitario per la Formazione sulla
Sicurezza



**UNIVERSITA' DI ROMA "TOR
VERGATA"**
Dipartimento di Ingegneria Elettronica

**REGISTRATIONS MUST BE COMPLETED THROUGH THE APPROPRIATE
REGISTRATION FORM AVAILABLE ON THE WEBSITE www.osdife.org, SECTION
"Courses – OSDIFE"**

THE OSDIFE DIRECTION