

# Imprendi 4.0 - Tuscan Start Up Academy 4.0

## Corso Cybersecurity

Programma edizione 2021

### Modulo 1 (2 h) - Prof. Rocco De Nicola

- Introduction to Cybersecurity;
- Confidentiality, Integrity, Authenticity.

### Modulo 2 (4 h) - Prof. Gabriele Costa

- Social Engineering;
- Application Security;
- Malware Analysis;
- Access Control.

### Modulo 3 (4 h) - Dr. Letterio Galletta

- Introduction to cryptography;
- Shared key and public key encryption;
- Message Authentication Techniques (Hashing);
- Digital signature;
- Certification Infrastructures (PKI and X.509);

### Modulo 4 (10 h) - Dr. Simone Soderi

- Networks fundamentals:
  - Network models, LAN/WAN, Network devices, Network protocols.
- Networks security concepts:
  - Security objectives, Network Threats, Security strategy.
- Networks protection:
  - Network perimeter security, NIPS/NIDS, VPN, Switch - Router security;
- Networks penetration:
  - Information gathering, scanning, enumeration
- Security protocols:
  - SSL, TLS, HTTPS, SFTP
- Digital Identity, Privacy and Regulations:
  - SPID, GDPR.
- EU Network and Information Security (NIS) directive
- Case studies:
  - Railway signaling network security;
  - Automotive network security: CAN bus.

## Calendario 1<sup>a</sup> sessione:

Data	Orario	Modulo	Durata
11/10/2021	16,30-18,30	MODULO 1	2 ore
12/10/2021	16,30-18,30	MODULO 2	2 ore
13/10/2021	16,30-18,30	MODULO 2	2 ore
14/10/2021	16,30-18,30	MODULO 3	2 ore
15/10/2021	16,30-18,30	MODULO 3	2 ore
18/10/2021	16,30-18,30	MODULO 4	2 ore
19/10/2021	16,30-18,30	MODULO 4	2 ore
20/10/2021	16,30-18,30	MODULO 4	2 ore
21/10/2021	16,30-18,30	MODULO 4	2 ore
22/10/2021	16,30-18,30	MODULO 4	2 ore