

# program at MedTech



**MedTech** Mediterranean Institute of Technology

# Master's degree in Cyber Security





# Master's degree in Cyber Security

The state of being protected against the criminal or unauthorized use of electronic data, or the measures taken to achieve this.

#### **#THREATS #CYBERSECURITY #CRIMINALS**

- **945,000,000,000\$** Losses by cybersecurity attacks in 2020
- **Over 180,000** Vulnerabilities detected in applications in 2021
- **Over 63,330,000** Black-hat hackers (malicious) in 2021

# Cyber Security Jobs & Salary



# Cyber Security Jobs & Salary

- Cyber Security Specialists
- Security or Cyber Security Engineers
- Cyber Security Technical Architects
- Security or Cyber Security Technicians
- Security or Cyber Security Principals
- Security or Cyber Security Administrators
- Penetration Testers
- Information Security, Cyber Security or Vulnerability Analysts
- A high-quality, professional pentest costs between \$15,000-\$30,000
- The average cybersecurity salary for this position is \$160,000 a year in
- USA, about \$13,300 a month
- Most wanted jobs in Google, Second in Amazon and Microsoft (IA first).
- **3**rd most wanted jobs in overall after AI and Data Scientists.

## How To be a Cyber Security Eo **Expert?**



# Cyber Security **Expert**

- Attend Cyber Security courses
- Be a Cyber Security student
- Follow up one of the Cyber Security program
- Get Cyber Security certifications: ceh, oscp, etc.
- Get good at any proramming language you hear about
- Aknowledge computer science fundamentals
- Attend pentest workshops
- Learn to listen, judge and analyse

You can do that by joining the Cyber Security program in MedTech University





### Goals

# Cyber Security

## **Master**

The master's degree in Cyber Security aims at specialized training in computer security (Cyber Security).

In response to a set of initiatives that have been developed at the national and international level aimed at developing skills in the field of Cyber Security (for example, the IFC-UTICA directive, the American law on the sharing of information in of cybersecurity, the European Directive for Security in the Union) as a means of supporting the growth of the digital economy, preserving the privacy of citizens, and combating and preventing cybercrime and cyberterrorism, the master's program follows the following objectives:

Improve the training of undergraduate students, focusing on design, development and control skills related to IT security.

Upgrade and improve the knowledge of IT professionals, providing them with the knowledge necessary to practice in the area of IT security, especially as IT security manager.

To provide advanced training in the various fields of computer security, enabling students to pursue a doctoral program.

Have in-depth and relevant knowledge of technological, human and organizational aspects in the various fields of IT security.

Have the necessary skills in the design, development and evaluation of IT security solutions.

Be able to perform functions in the area of IT security, in particular for the position of Information Security Officer.

Ability to integrate and lead research project teams in the field of computer security.

Ability to conduct research and development independently and to develop and deepen new skills in the field.

Know the legal, ethical and moral aspects relating to computer security.



# Curriculum 🛗

#### Semester 1

- Cryptography
- Cyber Security Assessment and Management
- Informatics Security and Law
- Effective Technical Communication
- Data Analytics
- Design and Development of Secure Software

### Semester 2

- Building Secure Infrastructures
- Information Technologies Security
- Security Auditing
- Security and Privacy
- Certification
- Engineering Ethics & Professional Practice

#### Semester 3

- Cryptography
- Cyber Security Assessment and Management
- Informatics Security and Law
- **✓** Effective Technical Communication
- Data Analytics
- Design and Development of Secure Software

### Semester 4







### **Conditions of admission**

The conditions of admission include in particular:

Have a **«Bachelor»** or bachelor's degree or a legal equivalent in: Sciences, communications and Multimedia, Computer science and systems engineering, electrical engineering, electrical and computer engineering, electrical engineering and telecommunications (GET).

### **Engineering:**

A **«Bachelor»** degree or recognized equivalent in other fields of engineering and natural sciences.

An engineering degree in: Computer Engineering, Computer Science, Communications and Multimedia, Computer and Systems Engineering, Electrical Engineering, Electrical and Computer Engineering, Electrical and Telecommunications Engineering.



## Two learning options

### **Full Time**

**Duration:** 2 years **Learning:** Blended

### **Part Time**

**Duration:** 2 years and a half

**Learning:** Blended

**Morning & Evening classes** 







South Mediterranean University

MSB . MedTech . LCI

