



Politecnico  
di Torino



# Welcome event

## MSc in Cybersecurity

### International students

# CdLM in Cybersecurity @ PoliTO

compliant with the ECSO Curricula  
(European Cybersecurity Organization)

- › one of the first implementations in the EU
- › clear, well-defined, and well-understood profiles
  - › a clear set of university courses covers topics that are considered essential at EU-level
- › primarily, it's an MSc in Engineering,
  - › even if it provides knowledge, abilities, and competencies in law, economics, and social sciences

inspired by other international standards

- › the NIST Risk Management Framework
- › emphasizes the importance of hybrid profiles

all courses are in English



# Careers



## Cybersecurity Analyst

assess the security posture of an information systems, monitors and respond to incidents, and performs forensic analysis

## Cybersecurity Designer

plans, designs, and implements the security measures that allow reaching the proper security level



## Cybersecurity Legal, Policy and Compliance Officer

checks compliance against standards, understands and evaluates legal strategies, understands business, and manages security at the company level

## Cryptography expert

defines and develops basic and advanced cryptography-based applications and programs



# The Master in Cybersecurity Engineering



## ☐ **all taught in English**

- ☐ lectures, exercises, and labs
- ☐ individual and group activities

## ☐ **4 Career paths** corresponding to 4 profiles:

- ☐ **Cyber Designer**
- ☐ **Cryptography expert**
- ☐ **Cyber Analyst**
- ☐ **Cyber Legal & Compliance Officer**

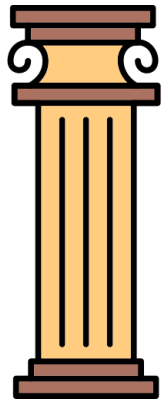
## ☐ **Interclasse:** *you can choose between*

- ☐ **LM-32 (Computer Science Engineering) and**
- ☐ **LM-66 (Cybersecurity)**

## ☐ conclude it with a Thesis or add an Internship

# The Design of the Cybersecurity Engineering master

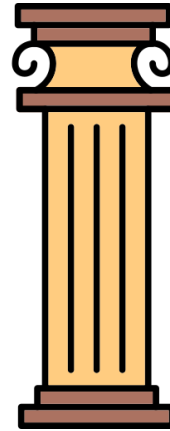
## Cybersecurity



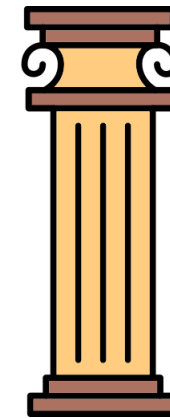
hybrid competencies



LM32 & LM66



compliance



Innovation



# Learning areas

Computer Science



Cybersecurity  
Protection



Cybersecurity  
Monitoring



Cryptography



Legal and  
Regulatory



Governance



# Careers



***Cryptography expert***



***Cyber Legal &  
Compliance Officer***



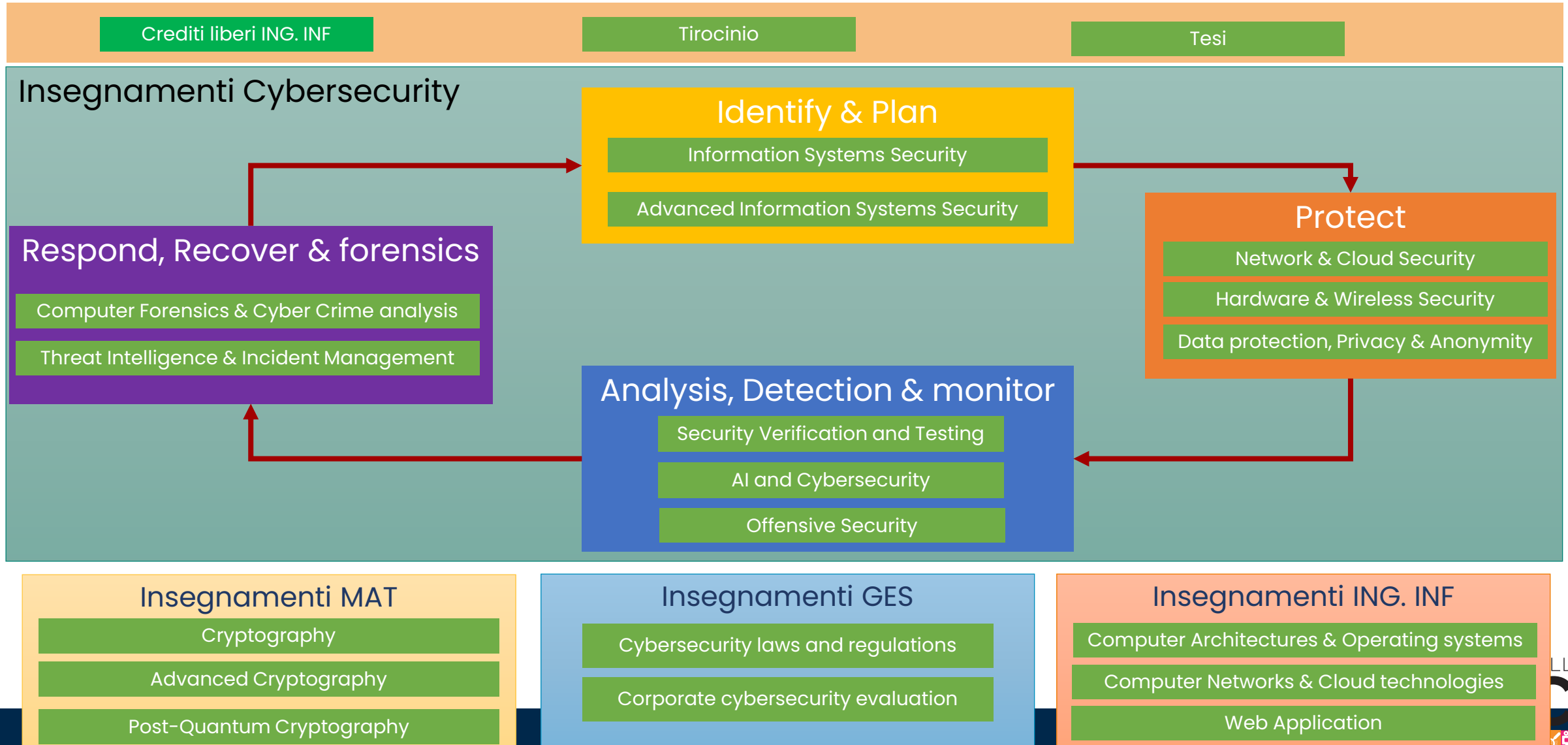
***Cyber Designer***



***Cyber Analyst***



# Study plan



# First year

...the same for all the careers



Name	CFU	Period
Computer architectures and operating systems	8	1
Information Systems Security	8	1
Corso di Base a scelta	6	1 o 2
Networks & Cloud Technology and Security	12	1 + 2
Web applications	8	2
Cryptography	6	2
Hardware & Wireless Security	12	2

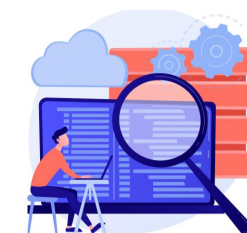


# Second Year

Ambito Giuridico, Economico Sociale (GES)

Ambito Matematico (MAT)

Ambito Cybersecurity (CYBER)



	Analyst	Designer	Officer	Cryptography
Obbligatoria	1 GES			
	1 CYBER	1 CYBER	1 CYBER	1 MAT
Caratterizzanti	2 CYBER	2 CYBER	2 GES	1 MAT
A scelta	1 CYBER o MAT	1 CYBER o MAT	2 CYBER o 1 CYBER + 1 MAT	2 CYBER
	1 GES	1 GES		1 GES



## Second Year: **Cyber Analyst**

Nome	CFU	Periodo	
Security Verification and Testing	8	1	
Cybersecurity laws and regulations	6	1	
<b>AI and Cybersecurity</b>	<b>6</b>	<b>1</b>	
Advanced Cryptography	6	1	1on 3
Advanced Information Systems Security	8	1	
Data protection, Privacy and Anonymity	6	1	
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Computer Forensics and cyber crime analysis	8	2	1on 2
Technology and Innovation Management in Cybersecurity	6	2	
<b>Threat Intelligence and Incident Management</b>	<b>6</b>	<b>2</b>	
Tesi oppure Tirocinio+Tesi	22	2	



# Second Year: **Cyber Designer**

Nome	CFU	Periodo	
Advanced Information Systems Security	8	1	1on 3
Cybersecurity laws and regulations	6	1	
Data protection, Privacy and Anonymity	6	1	
Advanced Cryptography	6	1	
Security Verification and Testing	8	1	
AI and Cybersecurity	6	1	
<hr style="border-top: 1px dashed #004a7c;"/>			
Computer Forensics and cyber crime analysis	8	2	1on 2
Technology and Innovation Management in Cybersecurity	6	2	
Offensive Security	6	2	
Tesi oppure Tirocinio+Tesi	22	2	

# Second Year: **Cryptography expert**



Nome	CFU	Periodo	
Cybersecurity laws and regulations	6	1	
Advanced Cryptography	6	1	
Security Verification and Testing	8	1	1on 2
Advanced Information Systems Security	8	1	
AI and Cybersecurity	6	1	1on 2
Data protection, Privacy and Anonymity	6	1	
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Computer Forensics and cyber crime analysis	8	2	1on 2
Technology and Innovation Management in Cybersecurity	6	2	
Post-quantum Cryptography	6	2	
Tesi oppure Tirocinio+Tesi	22	2	



## Second Year: **Cyber Legal & Compliance Officer**

Nome	CFU	Periodo	
Cybersecurity laws and regulations	6	1	
Data protection, Privacy and Anonymity	6	1	
Security Verification and Testing	8	1	Choose 2 on 4
Advanced Information Systems Security	8	1	
AI and Cybersecurity	6	1	
Advanced Cryptography	6	1	
<hr/>			
<b>Computer Forensics and cyber crime analysis</b>	<b>8</b>	<b>2</b>	
<b>Technology and Innovation Management in Cybersecurity</b>	<b>6</b>	<b>2</b>	
Tesi oppure Tirocinio+Tesi	22	2	

# Theses, Internships, studying abroad

- ❑ you may choose from

- ❑ Thesis → 22 CFU

- ❑ Internship 10 CFU + Thesis 12 CFU

- ❑ Thesis

- ❑ @PoliTO or any other companies and bodies

- ❑ in Italy or abroad

- ❑ Internships

- ❑ on-the-job training in cybersecurity companies

- ❑ spend one or two semesters studying abroad

- ❑ choose a double degree programs



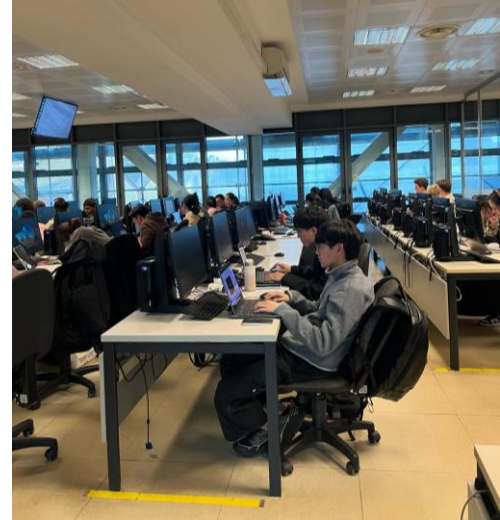
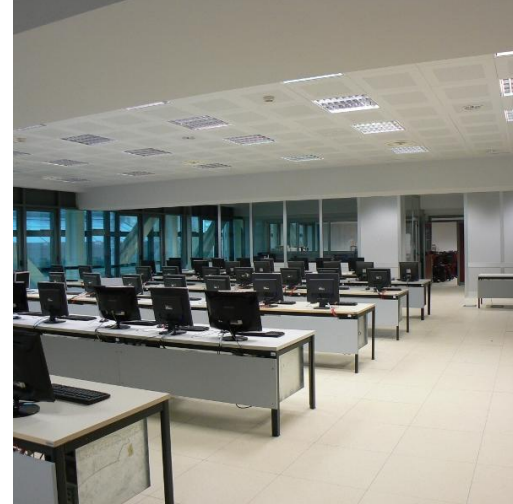


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# Description of Complementary Activities

# Labs

- ❑ Hands-on practical activities led by instructors in computer labs
- ❑ Application of theoretical concepts through real case studies
- ❑ Individual and group work to foster both autonomy and collaboration



Students'  
favourite!



# Seminars



**<ESCAPE>**  
EXPLAIN CYBERSECURITY WITH AN APERITIF

- ❑ Seminars on cutting-edge cybersecurity topics
- ❑ Held by international professors and industry experts
- ❑ Informal discussions follow each seminar, often accompanied by an aperitif







# Site Visits & Experiential Activities

- ❑ Explore real working environments to understand day-to-day cybersecurity operations
- ❑ Meet professionals in the field
- ❑ Gain practical insight into the inner workings of operational centers (e.g., SOC's)
- ❑ Discover and see cutting-edge technologies in action
- ❑ Learn about career opportunities firsthand



# CyberMonday



A dedicated event focused on the Master's Degree Program in Cybersecurity Engineering, featuring:

- Presentations of **research activities** at Politecnico di Torino
- Overview of **thesis and internship opportunities**, both at the university and with external partners in Italy or abroad
- Information on **international mobility programs**: Erasmus+, double degree programs, thesis abroad
- Introduction to **PhD and Master's programs** available after graduation





# Student Team: **pwnthem0le**





Website:



study plan:



Telegram:



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