

# Trends in Security Education and National Capacity Building

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# Almerindo Graziano



- CEO of Silensec
- PhD in mobile computer security from the University of Naples, Italy.
- Author of numerous security training courses
- Cyber security expert for International Telecommunication Union (ITU)
- Chair of ECSO SWGs on Security Awareness and Cyber Ranges
- Airmiles collector

# Silensec Cyber Exercises, National Cyber Competitions and Capacity Building

## Types Cyber Exercises Delivered

- Table Top
- Cyber Drill
- Functional
- Full Scale

## ITU Cyber Drills

Since 2014 Silensec has collaborated with the ITU for the organization, development and delivery of national and regional cyber drills around the world



## Silensec Cyber Range

Since 2017 Silensec's Cyber Range is used to host and deliver ITU cyber drill scenarios developed by ITU, ITU security experts and ITU partners

## Cyber Exercises Methodology

Silensec Cyber Exercises are designed using a top down methodology, starting from the identification of the skills and competences the exercise is meant to assess, down to the design and development of realistic environments and scenarios and the associated set of challenges and tasks to be carried out. Therefore, each scenario is uniquely designed to meet specific objectives and tailored for a specific target audience.

## National Cyberstars Cybersecurity Competitions

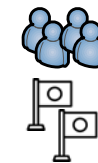
Silensec collaborates with national regulator authorities and national CERTs to deliver national cybersecurity competitions through the Cyberstars initiatives.



[www.cyberstars.pro](http://www.cyberstars.pro)

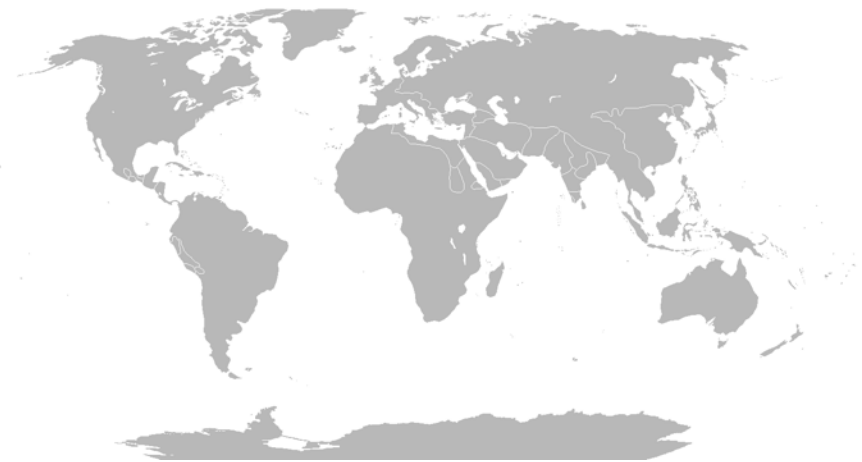


الهيئة الوطنية للأمن وسلامة المعلومات  
National Information Security & Safety Authority



**4000+ Participants**

**15 countries**



# The Security Skills Gap



**At least 3.5 million  
cyber security jobs will  
be left vacant by 2021**



**1 in 5 organization receives fewer  
than 5 candidates for each  
advertised security position and  
37% of the organisations lament  
that fewer than 1 in 4 of the  
candidates they do receive are  
actually qualified for the job!**

# The Challenges

- Companies prefer to invest in systems rather than competences
- ROI on security spending alone is difficult to justify
- Companies fear staff may leave once trained
- Training costs money, period!



after salary, opportunities for training are the second highest motivating factor in recruitment and staff retention followed by the reputation of the employer's IT department and potential for advancement.

## Security

**SEC504 Hacker Tools, Techniques, Exploits, and Incident Handling**

Dates: Mon, May 28 - Sat, Jun 02 (6 Days)

Fee: 5,915 EUR + **Travel and accommodation + Certification Attempt**

**GCIH Certification Attempt - 655 EUR** ⓘ

**OnDemand Bundle - 655 EUR** ⓘ

**NetWars Core Continuous Bundle - 1,135 EUR** ⓘ

**SEC511 Continuous Monitoring and Security Operations**

Dates: Mon, May 28 - Sat, Jun 02 (6 Days)

Fee: 5,915 EUR

**GMON Certification Attempt - 655 EUR** ⓘ

**OnDemand Bundle - 655 EUR** ⓘ

**NetWars Core Continuous Bundle - 1,135 EUR** ⓘ

**SEC560 Network Penetration Testing and Ethical Hacking**

Dates: Mon, May 28 - Sat, Jun 02 (6 Days)

Fee: 5,915 EUR

**GPEN Certification Attempt - 655 EUR** ⓘ

**OnDemand Bundle - 655 EUR** ⓘ

**NetWars Core Continuous Bundle - 1,135 EUR** ⓘ

**SEC617 Wireless Penetration Testing and Ethical Hacking**

Dates: Mon, May 28 - Sat, Jun 02 (6 Days)

Fee: 5,915 EUR

**GAWN Certification Attempt - 655 EUR** ⓘ

**NetWars Core Continuous Bundle - 1,135 EUR** ⓘ

**SEC760 Advanced Exploit Development for Penetration Testers**

**NetWars Core Continuous Bundle - 1,135 EUR** ⓘ



Delivery Mode	Location	Course Duration	Fees
Instructor-Led Online Training (1-on-1)	Client's Home/Office	<u>5 Days</u>	\$ 2,250
Classroom Training *	Dubai	5 Days	\$ 2,770
	India (Delhi, Bangalore, D (Rishikesh))		\$ 1,750
Fly-Me-a-Trainer	Client's Location	5 Days	On Request



### (ISC)<sup>2</sup> - Official CISSP Boot Camp

Qty	Description	Price
+	(ISC) <sup>2</sup> - Official CISSP Boot Camp (6 Days)	\$4,595.00 USD
1	Official (ISC) <sup>2</sup> Training Courseware w/ Official (ISC) <sup>2</sup> Flash Cards	Included
1	Official (ISC) <sup>2</sup> Evening Review w/ Official (ISC) <sup>2</sup> Practice Exam	Included
1	Official (ISC) <sup>2</sup> CISSP Study Guide 7th Edition ISBN-10:111904271	Included
1	Official (ISC) <sup>2</sup> CISSP Practice Tests 1st Edition ISBN-10:1119252288	Included
1	Training Camp's Exam Prep Study Guide	Included
1	Training Camp's CISSP Certification Guarantee	Included
1	Official (ISC) <sup>2</sup> CISSP Exam Voucher (\$699 Value)	Included
1	Hotel Accommodations (Select Locations)	Additional
1	(ISC) <sup>2</sup> Partner of Year Award Winner Promo Offer - Certain Restrictions Apply - Select Course Events Only	-\$600.00 USD
<b>Total After Discount</b>		<b>\$3,995.00 USD</b>





# The Market Response..

MASTER IN **CYBER SECURITY** IN 1 BUNDLE

~~\$1578~~ \$39



Certified Ethical Hacking Training Course



CompTIA Security+ Training



Using Python For Offensive Pentesting



Learn WiFi Hacking & Pentesting



Hacking Android Using Kali Linux



Certified Information Systems Security Professional CISSP

# The Market Response..

 jperry


Course **Verified**

## Python for Security Professionals

This course will take you from basic concepts to advanced scripts in just over 10 hours of material, with a focus on networking and security.

- © 15 CEU/CPE Hours Available
- Certificate of Completion Offered
- ⌚ 11 Hours




 Polymath

Course **Verified**

## Metasploit

This free Metasploit training class will teach you to utilize the deep capabilities of Metasploit for penetration testing and help you to prepare to run vulnerability assessments for

- © 6 CEU/CPE Hours Available
- Certificate of Completion Offered
- ⌚ 6 Hours



 gregwstuart


Course **Verified**


## CompTIA Linux+

Our free, self-paced online Linux+ training prepares students with the knowledge to become a certified Linux+ expert, spanning a curriculum that covers Linux maintenance tasks,

- © 10 CEU/CPE Hours Available
- Certificate of Completion Offered
- ⌚ 6 Hours



 **MCSA** FREE TRAINING  
CIB-2007


 SME Michael


Course **Verified**


## MCSA (Microsoft)

Our free, self-paced online MCSA training class will teach you all you need to know for the certification exam: how to configure file and print services, how to deploy, manage and

- © 20 CEU/CPE Hours Available
- Certificate of Completion Offered
- ⌚ 24 Hours



 **VIRTUALIZATION MANAGEMENT**  
By Dean Pongillo  
CIB-2014


 Polymath


Course **Verified**


## Virtualization Management

Our free, self-paced online Virtualization Management training class focuses on installing, configuring and managing virtualization software. You'll learn how to work your way

- © 20 CEU/CPE Hours Available
- Certificate of Completion Offered
- ⌚ 15 Hours



 **CompTIA CLOUD+** FREE TRAINING  
CIB-1001


 Justin Langham

Course **Verified**

## CompTIA Cloud+

Our free, online Cloud+ training addresses the essential knowledge for implementing, managing and maintaining cloud technologies as securely as possible. It covers cloud

- © 4 CEU/CPE Hours Available
- Certificate of Completion Offered
- ⌚ 3 Hours





# Welcome To Google University Free Admission Daily

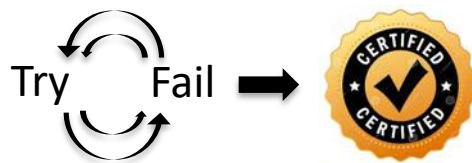


The University of Google  
NIHIL ESSET MELIOR

# What is Really Happening?



Which certification? Which training? Where can I practice?...



Emphasis is put on the achievement and not in the acquisition of competences



Paper Certifications and Certificates of Completion!



Finding the right security professional gets harder

# Cyber Ranges



An interactive, simulated representations of an organization's local network, system, tools, and applications that are connected to a simulated Internet level environment. National Initiative for Cyber security education (NIST)



According Gartner, by 2022, 15% of large enterprises will be using cyber ranges to develop the skills of their security teams, up from less than 1% today.

# Trends in Security Education

- Expect cyber ranges to have a predominant role in security education within the next 3 years
- Increase in use of cloud technology
- Charging model from “per-training” to “subscription-based” and from \$1,000s to \$10s
- Value added training from “teaching” to “mentoring”
- Changes in the recruitment practice and technologies