



# *Cyber Guru*

## Cyber Guru **Academy** Content Production

Creating, designing and producing training content that generates interest, involvement and motivation to learn is a daily challenge for the Cyber Guru Academy department. Because it is now clear that a highly engaging platform and a multitude of content is not enough to train people to defend themselves against cybercrime.

### **The 5 skills that make the difference**

**Content** is a **decisive element** in a truly effective Cybersecurity Awareness training course.

**Designing and implementing training programmes** means transforming technological content into functional content to be learned by everyone, including those who have a complex relationship with technology.

This transformation process can only be achieved if you have 5 very solid skills in the following areas: **Cybersecurity, Psychology, Andragogy, Communication and Multimedia.**

## The 5 skills that make the difference

### Cybersecurity

**Cybersecurity is a basic skill.**

Specifically, the Academy's fields of study focus mainly on research and analysis of cyber threats to reconstruct their dynamics, their potential consequences and understand the mentality of attackers. Equally important is "threat intelligence", which is necessary to stay constantly updated on the evolution of attack techniques.

### Psychology

**Competence in Psychology is also essential.**

In particular, everything related to the study of the cognitive and behavioural aspects of the human mind, such as:

- The study of the **attacker's mentality** and the levers of persuasion and manipulation used, to ensure a complete "mapping" between these levers and the different types of Cyberattacks.
- The study of **human vulnerabilities**, identified with the term "cognitive bias", to understand decision-making processes and conditioning, with particular attention to heuristic operations and expert intuitions.
- The study of **human cognitive architecture**, which acts as a bridge between psychology and training and which decisively influences training effectiveness and learning motivation mechanisms.

### Andragogy

**Another important aspect is a high level of knowledge of Andragogy or the science of adult education**, orientated towards business education and lifelong learning.

In this perspective, the application of the rules based on "Cognitive Load Theory", the main mechanism of adult learning, takes on particular importance in the choice of "Micro-Learning", to avoid training overload, and "Time-Spaced Learning", to obtain lifelong learning with training distributed over a long period and on a regular basis.

### Communication

**Communication is an equally necessary skill** because it has a fundamental effect on the effectiveness of learning. Particular attention is paid to the use of informative language, i.e. language that is "purified" of all forms of technological orthodoxy, which is essential for training that is aimed at everyone, even non-experts. Communication is followed by competence in "Semiotics": i.e., the discipline that studies the language of symbols and their meanings. This study is essential to understand how the latter can be used effectively in training.

### Multimedia

**The potential of this tool in training is enormous**, but if all the skills listed above are not brought into play, there is a risk of misuse, creating distraction phenomena that go against cognitive load theory. Our memory uses two channels: one dedicated to word processing, and the other to images. Only a correct balance of these two channels can lead to increased training effectiveness and avoid elements of distraction or boredom.