



# CYBER SECURITY CENTER YOUR CYBER PARTNER

1<sup>ST</sup> CENTRE FOR EDUCATION,  
TRAINING AND RESEARCH  
IN CYBER CRISIS MANAGEMENT



[www.univ-ubs.fr](http://www.univ-ubs.fr)



# RESPONDING TO KEY CYBERSECURITY ISSUES

**It is vital for companies and administrations to manage the risks of cyberattacks.**

- ▶ Damage to reputation and loss of credibility.
- ▶ Financial losses, theft of intellectual property or sensitive data, business interruption, restoration of information systems, costs related to criminal and civil liabilities.

## The Cyber Security Center links four major expertise

### EDUCATION

Teaching engineers and specialists about cyber defence and trustworthy computing

### TRAINING

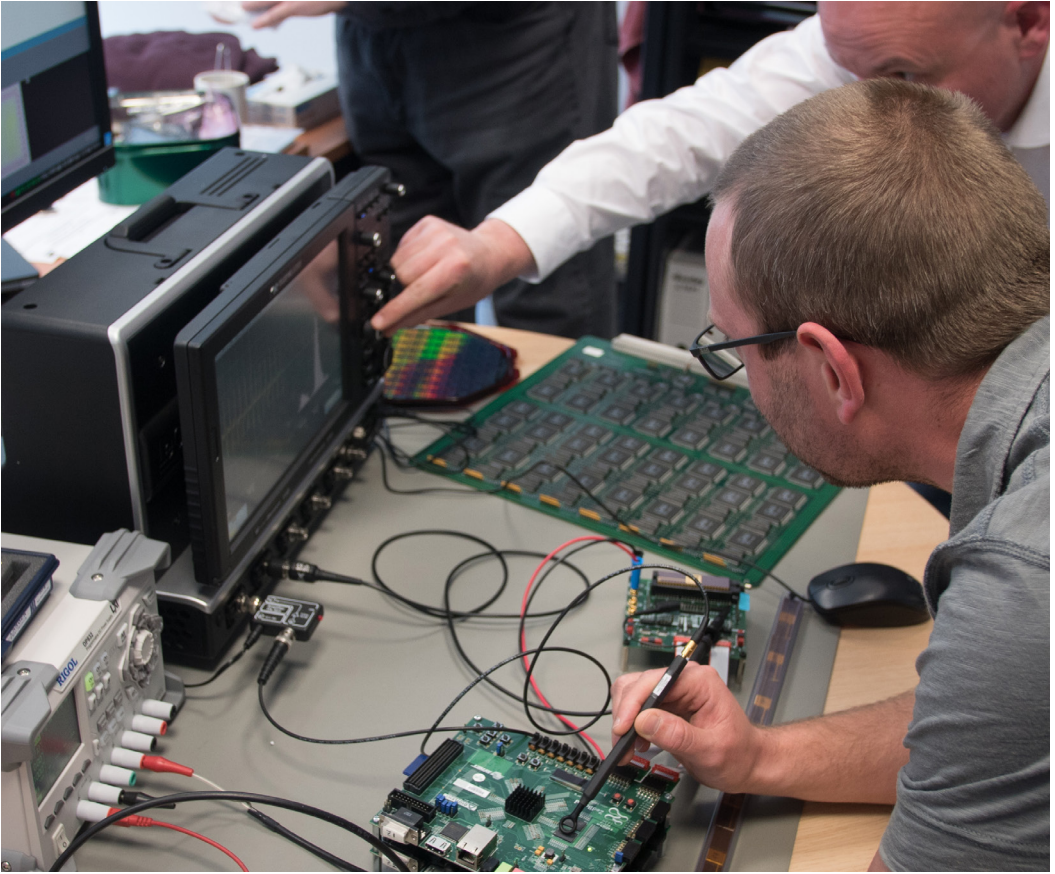
Coaching in cyber crisis management within the centre

### AWARENESS

Improving recognition of cyber threats among businesses

### RESEARCH

Conducting operational R & D with multidisciplinary research programs



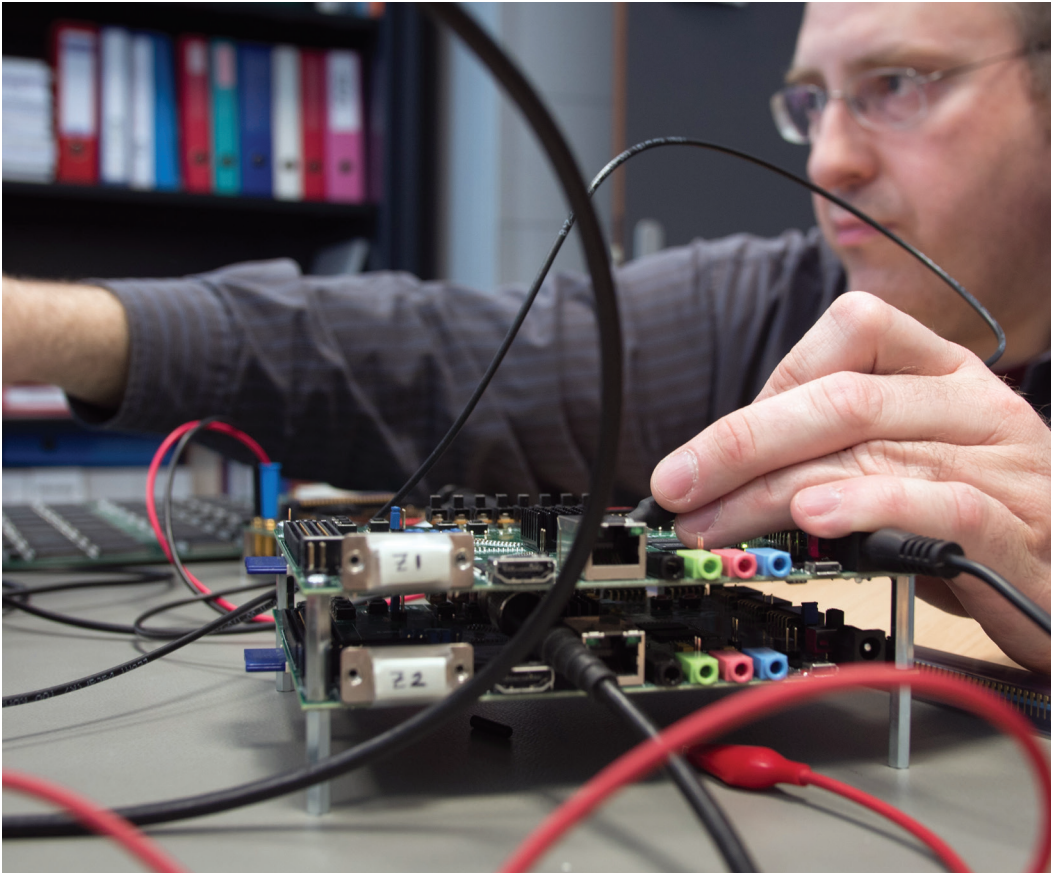
# CUSTOMIZED PACKAGES FOR YOUR COMPANY

**Adaptive tools and skills for innovative and pragmatic services in the cybersecurity and cyber defence areas.**

- ▶ Education plans:
  - Non-technical: cyber risk awareness (directors, managers, employees),
  - Technical: graduate education or skills training & cybersecurity/cyber defence expertise capabilities,
  - Comprehensive training in cybernetic crisis organization (management, leadership, methodology, technique, stress aspects...),
  - Running of «Capture The Flag» or «Escape Game» challenges.
- ▶ Maturity assessment of businesses in cybersecurity.
- ▶ Development guidance for continuity plans and activity resumption.
- ▶ Product or system security evaluations.

## Our assets

- ▶ Expertise guaranteed to ensure complete control over your own cybersecurity challenges.
- ▶ Services tailor-made to the real needs of businesses (personalized estimates and feedback, intra or inter-company packages).
- ▶ Attractive prices with no hidden costs.



## EDUCATION

**Our university has set up various high-level courses that encompass all cyber threat fields: from analysis and crisis management to the design of secure software and embedded systems.**

- ▶ **Our Engineer's degree in «Cyber Defence»** focuses on cybernetic crises analysis and management. This course, unique in France, is apprenticeship-based and recruits 50 students per year.
- ▶ **Our Engineer's degree in "Trustworthy Computing - Cybersecurity"** provides training in the design of secure software.
- ▶ **Our Master's degree in «Cybersecurity of Embedded Systems»** is also a unique higher education course in France: it is the only one entirely dedicated to the mixed «software-hardware» design of secure embedded systems.



## STATE-OF-THE-ART EQUIPMENT

### A high-tech space.

In Vannes, our «Cyber Range» – a 150 m<sup>2</sup> space, equipped with high-tech training rooms and virtualization platforms – supports students and businesses to deal with cyber crisis management. This equipment is unique in France. It works as a digital sandbox completely cut off from the Internet: students and businesses experiment on cloned, but disconnected, real life systems. The strength of this tool is that it encourages the implementation of exercises for SMEs, companies or large administrations.

### A dedicated «embedded systems» platform.

In addition to this equipment, we now also have a new “embedded systems” educational platform in Lorient. Physical attack test benches, vehicle electronics emulator, dedicated security software, frame analyzers, calculation servers ...



# UNIVERSITY RESEARCH TO REACH THE HIGHEST LEVELS

The Cyber Security Centre also relies on the multidisciplinary scientific expertise of 5 research laboratories in the following fields:

- ▶ Communicating Systems and Objects (Lab-STICC)
- ▶ Software (IRISA)
- ▶ Mathematics and Statistics (LMBA)
- ▶ Behaviour and Decision Making (Lab-STICC)
- ▶ Human Management (LEGO)

The associated research programs cover different themes ranging from crisis management methodology to the study of human behaviour in high stress situations. To do this, the cyber range is equipped with cameras whose images will be used by the research laboratories: a necessity to enable students and companies to rise to the highest level.

# FEATURED IN THE MEDIA

France 2 TV Channel

## «Internet: a cyber-defence school».

À lorient, une nouvelle formation se concentre sur la protection des objets connectés et de leurs usagers.

Le Parisien Magazine

## «At the cyber-defence school».

In Vannes, a unique curriculum in France prepares students to counter IT risks targeting businesses and sensitive public services. An essential weapon in a new war.

Le Monde Campus

## «A simulated cyber-attack to test future engineers».

In Vannes, in the heart of Brittany, a region that has become a “cyber centre of excellence”, an engineer’s school has been training a small army of cyber defenders since 2013. The culmination of the training is the simulation of cyber-attacks against vital infrastructures.



## ZOOM

Visit of the Minister of Higher Education, Research and Innovation.

During her visit to UBS on September 15, 2017, Frédérique Vidal visited the Cyber Security Centre.

According to Ms Vidal, «UBS has been able to rely on its research strengths to set up training courses of the highest quality and in a field that is essential for France and Europe».

## They support us



## Educational and research actors



## Contact

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