

Descriptif de l'enseignement

Nom, Prénom de l'enseignant :

LANGLOIS-BERTHELOT Jean /STORMANN Jan /

Titre de l'enseignement (dans la langue principale de l'enseignement) :

Cyber-Threats: Anticipation & Strategic Management

Titre de l'enseignement en anglais :

Cyber-Threats: Anticipation & Strategic Management

Langue principale de l'enseignement :

English

Pré-requis :

(Facultatif, **300 caractères maximum**, dans la langue principale de l'enseignement)

This course is without prerequisites

Présentation de l'enseignement et des objectifs pédagogiques :

(Obligatoire, **800 caractères maximum**, dans la langue principale de l'enseignement)

In the end of the course the student will be able to:

- *Know how to analyze the causes of a cyber crisis*
- *Understand cyber crisis management methods.*
- *Be up to date with the latest trends and innovations in cyber and digital threats;*
- *Know the opportunities offered by artificial intelligence in the field of cyber crisis management*

Modalités d'évaluation :

(Obligatoire - **300 caractères maximum**, dans la langue principale de l'enseignement)

- **Oral evaluation:** a 2 or 3 student team selects a subject from a defined list and presents it during 20 minutes. (coefficient 4)
- **Reading report:** the students are given an article. They write a 4 pages report.(coefficient 3)
 - **Writing final evaluation:** several questions about the courses. (coefficient 3)

Lectures conseillées :

- Boeke, S. (2018). National cyber crisis management: Different European approaches. *Governance*, 31(3), 449-464.
- Boisset, M.O, Langlois J. Une Analyse de l’Affaire Pegasus, CRSI, 2021
- Chen, J. (2020). Risk communication in cyberspace: a brief review of the information-processing and mental models approaches. *Current opinion in psychology*.
- Michael, J. B., Kuhn, D. R., & Voas, J. M. (2020). Cyberthreats in 2025. *IEEE Computer*, 53(6), 16-27.
- Rogoff, K. (2012). The Coming Cyber Crisis. *International Economy*, 26(3), 32-33.

Plan des séances (12) :

I- Acting and deciding in cyberspace (8h)

Session 1 : Specificities of cyber-threats + Intervention of Dr. Gaie

Session 2 : Mapping of the current and future cyber threats I

Session 3 : Mapping of the current and future cyber threats II

Session 4 : Mapping of the current and future cyber threats III

II- Cyber-threat management: What tools, what methods? (6h)

- Session 1: Tools for analyzing and reacting to a cyber crisis

- Session: 2: Detailed study of the management of tools for a Cybercrisis
- Session 3: Serious-game with students : Simulation of a cyber-crisis

III- Prevent and anticipate Cyber-threats (6h)

- Session 1: Structured analysis tools
- Session 2: Artificial Intelligence tools
- Session 3 : Intervention of a military expert

IV- Conclusion and Final Eval (4h).

-
- Session 1:: Conclusion (1h)

Session 2 : Final evaluation (3h)