

Practical assignment

The assignment for this lecture is to **Write an essay about one of the cybersecurity incidents in the water sector.**

The critical water infrastructure has been affected by constant digital growth, and the ongoing digital evolution/transformation brings efficiency and monitoring advantages. However, it also exposes water infrastructure to new threats, including cyberattacks. Thus, analysing a cybersecurity incident is vital for understanding adversarial behaviour (the methods, tools, and tactics used by attackers), developing mitigation strategies to prevent or minimize similar attacks, and identifying trends and patterns.

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The essay should be delivered within 1 week, and must be comprised by 2500 – 3000 words.

The following links are provided and considered to be useful for the implementation of the essay:

- Industrial Network Security: <https://www.sciencedirect.com/book/9780124201149/industrialnetwork-security>
- Guide to Industrial Control Systems (ICS) Security: <https://nvlpubs.nist.gov/nistpubs/specialpublications/nist.sp.800-82r2.pdf>
- Cyber Security for Cyber Physical Systems: <https://link.springer.com/content/pdf/10.1007/978-3-319-75880-0.pdf>
- Cyber Security for the Water Sector: <https://wcwc.ca/cyber-security-for-the-water-sector/>
- Infrastructure Cybersecurity/Water systems: <https://www.rpc.senate.gov/policypapers/infrastructure-cybersecurity-water-systems>
- A Review of Cybersecurity Incidents in the Water Sector: <https://arxiv.org/pdf/2001.11144.pdf>