

ITS 834 Emerging Threats and Countermeasures

Total points - 100

Final Research Case Analysis

The paper is due on end of day Sunday August 18, 2019

Topic: Implementing Cybersecurity in the Energy Sector

Imagine you have been hired as a security consultant for EnergyA which is an electric utility company based in the USA. The company has several locations in the U.S and is responsible for supplying a large portion of electricity for the Southeastern region in the U.S.

You have been charged with overseeing the implementation of cybersecurity best practices for EnergyA. In this course, you examined 10 design and security principles in the context of national and critical infrastructure protection. Identify any two security principles and evaluate and discuss how it can be applied to EnergyA.

Your case analysis needs to minimally address the following

- The relevance of cybersecurity in the energy sector
- Existing research on cybersecurity practices in the energy sector
- Why you are focusing on the specific two security principles
- For each security principle, identify its relevance in the energy sector
- For each security principle, identify how the principle can be implemented
- For each security principle, identify challenges presented in implementing it
- Discussion that connects your entire analysis with the topic and future implications of cybersecurity in the energy sector

Your research paper should be minimally 8 pages (double space, Font - Georgia with font size 12). The research paper needs cite at least 4 peer reviewed journal/book references.

The bibliography should be included as a separate page and is not part of the 8 page requirement. Student assignments will be run through Safe Assignment. Please ensure to check the safe assignment result prior to submitting.

You will have the chance to submit your assignment up to two times. So please submit earlier than the due date so you can check your safe assign score. If your safe assign score is more than 10 percent, you need to check your paper and make the needed updates and submit again. Text that are copied directly from outside sources without being in quotes is considered plagiarism. Please refer to the University's academic integrity policy. If there is text in your paper from outside sources that are not referenced and

in quotes, you will not receive a grade for the assignment and will be referred to the department.

<http://cumberland.smartcatalogiq.com/en/2017-2018/2017-2018-Undergraduate-Catalog/Academic-Affairs/Academic-Integrity-Policy>

The university of Cumberland library can be assessed at <https://www.ucumberlands.edu/library>

The research paper should include the following components.

- ✓ **Title Page** (Not part of the minimum 8 page requirement)
- ✓ **Abstract** (quick overview in your own words of the entire content of your paper, limited to 200-350 words)
- ✓ **Introduction** (1-2 pages, relevance of cybersecurity in the energy sector)
- ✓ **Literature Review** (2-4 pages, describes the research papers that you find in reference to the topic of cybersecurity in the energy sector)
- ✓ **Cybersecurity Implementation** (Why you are focusing on the two specific security principles; For each security principle, identify its relevance in the energy sector; For each security principle, identify how the principle can be implemented; For each security principle, identify challenges presented in implementing it)
- ✓ **Discussion** (2-3 pages) – (Your perspectives on the topic, try to connect the security principles identified together; discuss future implications of cybersecurity in the energy sector)
- ✓ **Conclusion** (1-2 paragraphs, This provides a final summary of your research paper)
- ✓ **Bibliography** in APA format

The following rubric will be used to grade your assessment

Evaluation Parameters	Percentage Weight
Did the student respond to the research topic	20
Did the student conduct sufficient literature review of the topic	20
Did the student provide relevant examples to support viewpoints	20
Did the student meet the content requirements of the assignment and discuss the key points identified in the question	20
Did the student provide a critical perspective on the topic	10
Did the student create a professional, well-developed report with proper grammar, spelling, punctuation and APA formatting	10
Total	100%

Please refer to the following for APA guidelines

https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html