



TASK 1 – RESEARCH SKILLS 3

Field:
Cybersecurity

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Research Skills (3)

Task 1

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INTRODUCTION

Hello everyone.

In this presentation, I will present my first research assignment in the field of Information Technology, with a specialization in cybersecurity.

The main objective of this presentation is to show the importance of choosing a good doctoral thesis title, while adhering to recognized scientific criteria.

To do this, I will first present a thesis title that meets the criteria for a good title, then a title that does not meet these criteria, explaining the reasons for the critique, and finally propose a personal title for a suggested study, while justifying the criteria that were taken into account.



Importance of the title in doctoral research

In scientific research, and particularly at the doctoral level, the title is not just a label, but a fundamental element of the academic work.

A good title should be clear, precise, informative, and representative of the actual content of the research. It should allow the reader to immediately understand:

- ☐ **The field of study,**
- ☐ **The main variables,**
- ☐ **The application context,**
- ☐ **And sometimes even the methodological approach.**

A poorly formulated title can create confusion, be misleading, or give an impression of a lack of rigor in the scientific work.



Example of a good doctoral thesis title

Here is now an example of a thesis title that meets the criteria of a good scientific title in cybersecurity:

"Analysis of the Impact of Artificial Intelligence-Based Intrusion Detection Systems on the Security of Public Sector Network Infrastructures"

This title is considered a good title for several reasons:

First, it is clear and precise: it is immediately understood that the research focuses on the cybersecurity of network infrastructures.

Second, it is thematically specific, as it focuses specifically on artificial intelligence-based intrusion detection systems.

Third, it indicates a precise application context, namely public sector companies.

Finally, it highlights a relationship between variables, particularly the impact of artificial intelligence on network security, which is essential for scientific research.

✗ Example of a bad thesis title and critique

I will now present a title that does not meet the criteria of a good research title:

"Cybersecurity and New Technologies"

This title has several major problems.

First, it is **far too vague**. The terms 'cybersecurity' and 'new technologies' are very broad and do not clearly identify the research topic.

Second, no variables are defined: it is unclear what is being studied or what relationship is being analyzed.

Third, there is no specified spatial, institutional, or sectoral context.

Moreover, this title does not allow for identifying a clear scientific problem or a specific method of analysis.

In summary, this title could be suitable for a popular science article or a general conference, but it is not appropriate for a doctoral thesis, which requires rigor, precision, and clear boundaries.

Title proposed by myself and justification

I will now propose a personally suggested research title, taking into account the academic criteria for a good scientific title:

"Assessment of Cybersecurity Incident Management Strategies in Critical Information Systems of Companies in the Energy Sector"

This title has been formulated in accordance with several essential criteria.

First, it is specific and explicit, as it focuses on cybersecurity incident management.

Next, it clearly defines the scope of application, namely critical information systems.

It also identifies a specific sector, that of energy, which helps to narrow the research framework.

Finally, it reflects an analytical and evaluative approach, which aligns with a doctoral study aimed at producing actionable and scientifically valid results.

Conclusion

In conclusion, choosing the title is a strategic step in any doctoral research.

A good title must be clear, precise, well-defined, relevant, and true to the content of the study.

Through these examples, we have seen that a well-constructed title facilitates understanding of the topic, enhances the scientific credibility of the researcher, and effectively guides the reader.

This reflection provides an essential foundation for formulating a solid doctoral project in information technology and cybersecurity.

Thank you for your attention.

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