

Some specifics of writing and defending a cyber security related thesis

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Specifics of cyber security related thesis

Three main cases:

- 1. The thesis is dedicated to solving a specific cyber security related issue**
- 2. The thesis is not directly aimed at solving a cyber security issue; however, the primary solution method originates from the field of cyber security**
- 3. Neither the thesis nor the proposed solution method is specifically focused on solving a cybersecurity issue; however, cybersecurity-related techniques play a significant role in the implementation of the solution.** In this case, it is essential to clearly demonstrate and justify the significance of these cyber security related techniques to the defending committee

Criteria for a cyber security related thesis

A thesis can be classified as a cyber security related thesis if the classical security harming model is relevant to the main content of the thesis in some aspect.

In other words, if it is firmly related to some of listed items:

- **assets**
- **threats** affecting assets
- **vulnerabilities** inherent in assets'
- **risks** and their' mitigation
- **security measures (safeguards)** modifying assets

If such a connection seems artificial, then **it's not a cyber security related thesis and cannot be an IVSB curriculum final thesis**

Specifics of defending speech (my experience)

Your aim is to define and solve a specific (well-defined) problem. Please focus on the following three aspects. A good practice is to devote approximately equal attention (and time) to each of these parts.

- 1. First, describe the initial situation.** Explain the context before the problem was addressed and clearly justify the real need for solving it (i.e., why you undertook this work in the first place).
- 2. Second, briefly describe your analysis and decisions.** Summarize what you actually did during your work. Your personal contribution must be clearly distinguishable from prior work and from contributions made by others.
- 3. Third, describe and evaluate your results.** Provide an assessment of the outcome and discuss its significance.

Small additional practical tips

- **Do not assume that the defense committee is familiar with the background of your work in detail — usually, it is not.** Especially if the topic is highly specific, begin with a broad overview and then gradually move to a more detailed and focused explanation
- **All images, diagrams, and graphs used in the defense presentation must contain sufficiently large and legible text.** As a general rule, text smaller than 18-point font is unreadable and therefore useless. Remember that any text included in figures from your written thesis can always be removed, added, or modified using image editing tools
- **A practical demonstration may be included in the defense presentation only if it significantly supports one of the three main parts outlined on the first slide.** There must also be a clear reason to believe that the defense committee, which may not be familiar with the technical details, will be able to understand the demonstrated process or activities clearly

Thank you!