

Topic	
Methods, benefits, and limitations of automating penetration tests for selected medical devices	<p>This project will be inductive since I will start with collecting observations from experiment &amp; literature. I would also analyze the data and would conclude whether there are or will be potential benefits in automating penetration tests for some medical devices.</p> <p>This topic will be addressed via explanatory research since there cannot be a conclusive result from the topic. It is only possible to explore this topic and try to get a better understanding. It is not possible to provide a finite result like A is better than B.</p> <p>For the literature review a qualitative approach is deemed appropriate. This will be done by studying reports from people trying to automate pen-test in general.</p> <p>Additionally, this topic is planned to be addressed by experiment. It is planned to create code, that might increase the speed of pen-testing for medical devices. It also might be possible to build hardware to automate and speed up certain steps. This method is a quantitative method, since the results (e.g., time reduction by automation) will be measurable.</p>
Implementing Cyber Security tools and/or techniques in Local transportation system in Berlin	<p>Explanatory Research would be suited best here since the title does not suggest that there is a specific question to answer. It rather suggests that information should be collected that provide a better understanding of the topic.</p> <p>I would use a qualitative approach. I would do an indirect case study, where I would try to identify company reports or documents that aid to a better understanding of the topic.</p>

(Dawson 2015, UoEO 2022)

## References

Dawson W. C. (2015) *Projects in Computing and Information Systems A Student's Guide* Pearson publishing, Third Edition, Harlow England

UoEO (2022) *Lecture cast Research Questions, the Literature Review and the Research Proposal* Available from <https://www.my-course.co.uk/Computing/Computer%20Science/RMPP/RMPP%20Lecturecast%201/content/index.html#/> Accessed on 01.02.2022