

Department	07 Computer Science and Mathematics
Course title	Project Seminar IT Security
Hours per week (SWS)	6
Number of ECTS credits	10
Course objective	<ul style="list-style-type: none">* Students apply IT security methods to concrete problems.* Students evaluate their solutions independently.* Students evaluate the work of others and give constructive feedback.* Students are working in project groups and apply scientific methods to chosen tasks
Prerequisites	20 ECTS of IT security knowledge of which at least ten ECTS credits are in-depth knowledge
Recommended reading	<ul style="list-style-type: none">* The Science of Scientific Writing, George D. Gopen and Judith A. Swan, American Scientist* Mathematical Writing, Donald E. Knuth et al., MAA Notes, The Mathematical Association of America* How to Write a Good Scientific Paper, Chris A. Mack, SPIE., ISBN: 9781510619135, 2018* Steps of the Scientific Method, www.sciencebuddies.org
Teaching methods	Individual Support, Presentation slides with beamer, blackboard, flipchart, etc.
Assessment methods	Seminar Paper Presentation
Language of instruction	English
Name of lecturer	Prof. Dr. Peter Trapp
Email	peter.trapp@hm.edu
Link	https://www.cs.hm.edu/die_fakultaet/ansprechpartner/professoren/trapp/index.de.html https://zpa.cs.hm.edu/public/module/367/
Course content	<p>At the beginning, the task is defined via joint brainstorming and then implemented by a procedure in project phases. Special emphasis is placed on scientific methods and applied research. The implementation of dedicated IT security activities such as determination of protection needs, threat and risk analysis, creation of a dedicated security concept, implementation of security measures and security checks. Results of the individual working groups are:</p> <ul style="list-style-type: none">* Independent work on a current problem in IT security* Application of scientific and research methods* Preparation of a conference and/or journal paper* Reviewing scientific papers of fellow students* Presentation of the work in the context of a lecture <p>The project work can be carried out with an industrial partner to bring in current industrial requirements, knowledge and skills. Depending on the concept and objectives, the number of participants is 6 to 12 students and the venue can be demand-oriented with an industrial partner.</p>
Remarks	