

## Courses in English Course Description

**Department** 04 Electrical Engineering and Information Technology

Course title Network Security

Hours per week (SWS) 4

Number of ECTS credits 5

Course objective Get a thorough understanding of network security threats, impact and countermeasures.

Prerequisites Understanding of computer networks and protocols (TCP, IP, IPv6).

**Recommended reading** For prerequisites: Peterson, Davie: Computer Networks

For the lecture: script available, web ressources

Teaching methods Lecture, lab/home work with presentations

Assessment methods Written exam

Language of instruction English

Name of lecturer Prof. Dr. Manfred Paul

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Link <a href="http://www.ee.hm.edu/fk/prof/paul/index.html">http://www.ee.hm.edu/fk/prof/paul/index.html</a>

Course content The security landscape, security needs, introduction into cryptography, identification and

authentication, key management and PKI, network reconnaissance, sniffing, exploiting networks,

network defenses, mobile code, software vulnerability and reliability, security strategies

Remarks