Hochschule München University of Applied Sciences

Courses in English
Course Description

Department	07 Computer Science and Mathematics
Course title	Cyber Defense
Course number	IT-WPF-0013
Hours per week (SWS)	4
Number of ECTS credits	5
Course objective	The following skills are taught: - Students are able to assess and describe current threats - Students are able to independently implement procedures for attack detection - Students implement security measures in complex environments and can develop new measures - Students are able to apply the incident management process themselves - Students know the necessary tools for incident handling, cyber threat intelligence and attack detection
Prerequisites	Basic knowledge of IT security, knowledge of networks and operating systems
Recommended reading	- Handbook for Computer Security Incident Response Teams (CSIRTs), CERT/CC - Defensive Security Handbook: Best Practices for Securing Infrastructure; Lee Brotherston and Amanda Berlin: ISBN-13: 978-1491960387
Teaching methods	Blackboard, slides, projector, guest lectures
Assessment methods	Modularbeit
Language of instruction	English
Name of lecturer	Prof. Dr. Hendrik Venter
Email	
Link	
Course content	The various areas of the field of “Cyber Defense” are supplemented with practical exercises. These are advanced topics in these areas: - Fundamentals of Cyber Threat Intelligence - Planning and operation of proactive IT security mechanisms - Attack detection in the network and on systems - IT security incident handling - Fundamentals and structure of modern IT security architectures - Secure operation of core infrastructures such as DNS, routing, etc.
Remarks	