

Area of Study: Networks and Digital Communication

Responsible: Prof. Dr.-Ing. Reinhard German (Inf 7)
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	Chair	ECTS	SWH		Sem	Exam	
			L	S		written (min.)	oral
Mandatory Modules							
Communication Systems*	Inf 7	5	2	2	W	90	
Quality of Service of Communication Systems*	Inf 7	5	2	2	S	90	
Information Theory and Coding*	IDC	5	3	1	S	90	
Mobile Communications*	IDC	5	3	1	W	90	

Mandatory-Elective Modules EEI							
Advanced Communication Networks*	IDC	5	3	1	S		x
Equalization and Adaptive Systems for Digital Communications*	IDC	2,5	2	0	W		x
MIMO Communication Systems*	IDC	5	3	1	S	90	
Transmission and Detection for Advanced Mobile Communications*	IDC	2,5	2	0	S		x
Channel Coding*	IDC	5	3	1	S	90	
Channel Coding on Graphs*	IDC	5	3	1	S		
Machine Learning in Communications*	IDC	5	3	1	W		x
Optical Communication Networks*	IDC	2,5	2	0	W		x
Optische Übertragungstechnik	LHFT	5	2	2	S		x
Digitale Rundfunksysteme	LIKE	2,5	2	0	W	90	
Kommunikationselektronik	LIKE	5	2	2	S	90	
Kommunikationsstrukturen	LIKE	5	2	2	W	90	
Satellitenkommunikation	LIKE	5	2	2	S	90	
Globale Navigationssatellitensysteme	LIKE	5	2	2	W	90	
Statistical Signal Processing*	LMS	5	3	1	W	90	
Image, Video, and Multidimensional Signal Processing*	LMS	5	3	1	W	90	
Machine Learning in Signal Processing*	LMS	5	3	1	W	90	
Drahtlose Automobilelektronik	LTE	5	2	2	S	90	
RF- and Digital Architecture of Radio Systems	LTE	2,5	2	0	S		x
Integrierte Schaltungen für Funkanwendungen	LTE	5	2	2	W	90	
Schaltungen und Systeme der Übertragungstechnik	LTE	5	2	2	S	90	
Advanced Topics in Perceptual Audio Coding*	AL	2,5	2	0	W		x

Mandatory-Elective Modules Computer Science							
Einführung in die IT-Sicherheit	Inf 1	5	2	2	W	90	
Security and Privacy in Pervasive Computing	Inf 1	5	2	2	W		
Programming and Architecture of Compute Clusters*	Inf 2	7,5	4	2	S		x
Verteilte Systeme	Inf 4	5	2	2	S		
Data Warehousing und Datenstromsysteme	Inf 6	5	4	0	S	60	x
Datenbanken in Rechnernetzen und Transaktionssysteme	Inf 6	5	4	0	S		x
Implementierung von Datenbanksystemen	Inf 6	5	2	2	W	90	
Konzeptionelle Modellierung	Inf 6	5	2	2	W+S	90	
Advanced Networking*	Inf 7	5	2	2	W	90	x
Fahrzeugkommunikation	Inf 7	5	2	2	S	90	
Pervasive Computing	Inf 7	5	2	2	W	90	
Simulation and Modelling I	Inf 7	7,5	2	4	W		x
Smart Grids und Elektromobilität	Inf 7	5	2	2	W	90	

*English lecture or workaround