

# DAAD-Network “Dependable Cyber Physical Systems”

## Catalogue of Master-Level Lectures in English

Title	Lecturer	University	Credits	Winter	Summer
Solar energy materials research & solar cells	Bär	BTU	6	●	
Laboratory Techniques and Metrology	Schenk	BTU	4	●	
Crystal Growth	Siche	BTU	4	●	
Semiconductor Materials and Device Physics	Schröder	BTU	6	●	
HW / SW Co-Design for Embedded Systems*	Vierhaus	BTU	6		●
Processor Architecture*	Vierhaus	BTU	8	●	
Dependability and Fault Tolerance*	Vierhaus	BTU	6	●	
Low-Power System Design*	Vierhaus	BTU	6		●
Test and Testable Design of Digital Systems*	Vierhaus	BTU	6	not regularly	
Virtual Reality*	Cunningham	BTU	6	●	
Mobile Communication Systems II*	Kraemer	BTU	6	●	
Foundations of Data Mining*	Schmitt	BTU	6	●	
Distributed Control Systems*	Berger	BTU	6	●	
Neural Networks and Learning Theory*	Meer	BTU	6	●	
Compiler Construction*	Hofstedt	BTU	6	●	
Wireless Sensor Networks*	Langendörfer	BTU	6	●	
Security in pervasive systems*	Langendörfer	BTU	6		●
Hardware/Software Co-design	Rozkovec	TUL	5		●
Human-Computer Interaction	Jeníček	TUL	5		●
Diagnostics and Reliability	Novák	TUL	5		●
Programmable circuits	Novák	TUL	5		●
Digital Systems Verification	Raik	TTU	5	●	
Dependability and fault tolerance	Jervan	TTU	5		●
Design for Test	Ubar	TTU	5	●	
Digital Test and Diagnosis	Ubar	TTU	5		●
Programmable Controllers	Kasprzyk	SUT	5	●	●
Sensors and Actuators	Buchczik	SUT	4	●	
Digital and Analogue Telecommunication	Izydorzycy	SUT	4		●

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\* Lectures in English upon demand

## Further Lectures / Out of project scope

Title	Lecturer	University	Credits	Winter	Summer
Image analysis	Chaloupka	TUL	5		●
Digital Systems Processing	Koldovský	TUL	5		●
Classification and Decision Methods	Nouza	TUL	10		●
Speech Processing in Human-Comp. Int.	Nouza	TUL	5	●	
Computer Systems Engineering		TTU	5	●	
Foundations and Management of Cyber Security		TTU	5	●	
Applied Data Communication		TTU	5	●	
Digital Systems Modeling and Synthesis		TTU	5	●	
Verification of Digital Systems		TTU	5	●	
Embedded systems		TTU	5	●	
Advanced Course in Programming I		TTU	5	●	
Basics of Computer Aided-Design		TTU	5	●	
Analysis of Programming Languages		TTU	5	●	
Circuits, Systems, Signals		TTU	5	●	
Intelligent Control Systems		TTU	5	●	
Modeling and Identification		TTU	5	●	
Control Instrumentation		TTU	5	●	
Advanced Programmable Logic Controllers		TTU	5	●	
Microprocessor Systems		TTU	5		●
Dependability and Fault Tolerance		TTU	5		●
Systems-on-Chip Design		TTU	5		●
Digital Systems Design		TTU	5		●
Timing Analysis of Software Dynamic Properties		TTU	5		●
Software Project Management		TTU	5		●
Circuits, Systems, Signals		TTU	5		●
Proactive Technologies		TTU	5		●
Modern digital signal processor architecture	Pawlowski	PUT		●	
Fast prototyping of digital signal processing – from model to hardware/software realization	Dabrowski	PUT		●	
Graceful degradation in digital signal processing	Pawlowski	PUT		●	
Embedded electronic systems	Pawlowski	PUT			●
Multimedia data streaming	Dabrowski / Pawlowski	PUT			●
Neural networks and genetic algorithms	Dabrowski	PUT			●
Image and audio processing	Dabrowski	PUT			●
Vision systems and human-machine interfaces	Dabrowski	PUT			●

Biotechnical Systems	Kimmel, Nocoń	SUT	3	●	
Programmable Logic Devices	Kulisz	SUT	2		●
Cellular Phone Systems	Sułek	SUT	2	●	
Advanced Control	Gessing	SUT	6		●
Mobile Systems Navigation	Nawrat	SUT	4	●	●
Wireless Networks and Mobile Devices	Zieliński	SUT	2	●	
Distributed Computer Systems	Cupek	SUT	4	●	
Digital Circuits	Sakowski, Garbolino	SUT	4		●
Systems and Signals *	Pułka	SUT	3		●
Embedded and Microprogrammable Systems Design*	Czyż	SUT	3	●	
Advanced Signal Processing*	Figwer	SUT	3	●	
New Technologies in Control Systems*	Kasprzyk, Jakuszewski	SUT	3	●	

\* **Courses delivered at SUT partially in English** (lecture in English, other course components in Polish)