

# 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		●

### Further Lectures / Out of project scope

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· Lectures in English upon demand

<b>Title</b>	<b>Lecturer</b>	<b>University</b>	<b>Credits</b>	<b>Winter</b>	<b>Summer</b>
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			●