



MEAD Education S.A.

Cryptographic Engineering

EPFL, LAUSANNE, SWITZERLAND

JUNE 30 – JULY 4, 2013

MONDAY, June 30

08:30 - 10:00 am	Introduction to Block Ciphers; DES and AES	C. Paar
10:30 - 12:00 pm	Lightweight Block Ciphers for RFIDs	C. Paar
01:30 - 03:00 pm	Modular Arithmetic and Finite Fields for Cryptography	C. K. Koc
03:30 - 05:00 pm	Fundamentals of Public-Key Cryptography	C. K. Koc

TUESDAY, July 1

08:30 - 10:00 am	Specialized hardware for secret-key algorithms	I. Verbauwhede
10:30 - 12:00 pm	Introduction to PUFs (Physically Unclonable Functions)	I. Verbauwhede
01:30 - 03:00 pm	Public-Key Cryptography: Algorithms and Protocols	C. K. Koc
03:30 - 05:00 pm	Software and Hardware Realizations of Public-Key Cryptography	C. K. Koc

WEDNESDAY, July 2

08:30 - 10:00 am	A Survey of Cryptographic Accelerators for Public-Key Cryptography	E. Trichina
10:30 - 12:00 pm	Trusted Computing Architectures, SSL and IPsec	P. Rohatgi
01:30 - 03:00 pm	Introduction to Side-Channel Analysis	M. Joye
03:30 - 05:00 pm	Electromagnetic Analysis and Advance Side-Channel Analysis	P. Rohatgi

THURSDAY, July 3

08:30 - 10:00 am	RSA - Side Channel Attacks & Countermeasures	M. Joye
10:30 - 12:00 pm	ECC - Side Channel Attacks & Countermeasures	M. Joye
01:30 - 03:00 pm	Side Channel Attacks to Block Ciphers: DES & AES	F.-X. Standaert
03:30 - 05:00 pm	Countermeasures for Block Ciphers	F.-X. Standaert

FRIDAY, July 4

08:30 - 10:00 am	Random Number Generators for Cryptographic Applications	W. Schindler
10:30 - 12:00 pm	Evaluation Criteria Non-Deterministic Random Number Generators	W. Schindler
01:30 - 03:00 pm	Random Number Generator Design Constraints and Challenges	V. Fischer
