



**MEAD** Education S.A.

# Cryptographic Engineering

**EPFL, LAUSANNE, SWITZERLAND  
JUNE 22-26, 2020**

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## **MONDAY, June 22**

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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	Public-Key Cryptography: Algorithms and Protocols	Ç. K. Koç
03:30-05:00 pm	Integer Arithmetic Algorithms and Architectures	Ç. K. Koç

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## **TUESDAY, June 23**

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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	Finite Field Arithmetic Algorithms and Architectures	Ç. K. Koç
03:30-05:00 pm	Public-Key Cryptographic Hardware and Embedded Systems	Ç. K. Koç

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## **WEDNESDAY, June 24**

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08:30-10:00 am	Trusted Computing Architectures, SSL and IPsec	P. Rohatgi
10:30-12:00 pm	Introduction to Side-Channel Analysis	M. Joye
01:30-03:00 pm	RSA - Side Channel Attacks & Countermeasures	M. Joye
03:30-05:00 pm	Electromagnetic Attacks, Countermeasures and Advanced Analysis Techniques	P. Rohatgi

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## **THURSDAY, June 25**

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08:30-10:00 am	ECC - Side Channel Attacks & Countermeasures	M. Joye
10:30-12:00 pm	Cryptographic Engineering in a Post-Quantum World	Çetin K. Koç
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

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## **FRIDAY, June 26**

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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

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