universität·freiburg

Lectures belonging to the specialization area Cyber-Physical Systems / Vorlesungen zugehörig zur Spezialisierungsrichtung Cyber-Physical Systems

Stand April 2025 / As of April 2025

Advanced Lectures | Weiterführende Vorlesungen:

- Rechnerarchitektur / Computer Architecture
- Softwaretechnik / Software Engineering

Current Specialization Courses | Aktuelle Spezialvorlesungen:

- Advanced Algorithms
- Algorithms for Wireless Communication
- Automated Machine Learning
- Blockchain and Cryptocurrencies
- Compiler Construction
- Concurrency, Theory and Practice
- Cyber-Physical Systems – Discrete Models
- Cyber-Physical Systems – Program Verification
- Debugging and Fuzzing
- Digital Health (DH)
- Einführung in die Kryptographie/Introduction to Cryptography
- Einführung in Embedded Systems / Introduction to Embedded Systems
- Embedded Computing Entrepreneurship (2ES)
- Funktionale Programmierung / Functional Programming
- Grundlagen von Programmiersprachen / Essentials of Programming Languages
- Hardware Security and Trust
- Interactive Proof Systems and Cryptographic Protocols
- Isabelle/HOL: programming, verified!
- Modellbildung und Systemidentifikation / Modelling and System Identification
- Numerical Optimization
- Numerical Optimal Control in Science and Engineering
- Peer-to-Peer Networks
- Probabilistic Graphical Models
- Real-Time Operating Systems and Worst-Case Execution Times
- Robot Mechanics
- Soft Robotics
- Test und Zuverlässigkeit / Test and Reliability
- Verifikation Digitaler Schaltungen / Verification of Digital Circuits
- Verteilte Systeme / Distributed Systems
- Wearable and Implantable Computing (WIC)

Previous Specialization Courses (not offered any more):

- Das fehlende Semester -- Linux, Tools, und vieles mehr / The missing semester -- Linux, tooling and much more
- Distributed Computing
- Drahtlose Sensornetze / Wireless Sensor Networks
- Entscheidungsprozeduren / Decision Procedures
- Formale Methoden für Java / Formal Methods for Java
- Quantitative Verifikation / Quantitative Verification
- State Space Control Systems