COURSE DETAIL

CONCURRENT, DISTRIBUTED AND PARALLEL PROGRAMMING
Country Germany
Host Institution Free University of Berlin
Program(s) Free University Berlin
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Computer Science
UCEAP Course Number 103
UCEAP Course Suffix
UCEAP Official Title CONCURRENT, DISTRIBUTED AND PARALLEL PROGRAMMING
UCEAP Transcript Title CD&P PROGRAMMING
UCEAP Quarter Units 5.50
UCEAP Semester Units 3.70

Course Description

Programming and synchronizing concurrent processes that access shared resources: non-sequential programs and processes in their various forms; non-determinism, determination; synchronization mechanisms: locks, monitors, guards, events, semaphores; non-sequential program execution and object orientation; process control, selection strategies, priorities, dealing with and avoiding deadlocks; co-routines, implementation, multiprocessor systems; interaction via messages; programming and synchronizing concurrent processes that interact via message exchange; remote calling techniques; client-server, peer-to-peer; parallel computing on the network; coordination languages; processing on the server and on the client, mobility; middleware, structured communication, static and dynamic interfaces; event-based and stream-based processing; security of applications on the network; outlook on non-functional properties (time, memory, quality of service).

Language(s) of Instruction
German

Host Institution Course Number
19322101

Host Institution Course Title
NEBENLÄUFIGE, VERTEILTE UND PARALLELE PROGRAMMIERUNG

Host Institution Course Details
https://www.fu-berlin.de/vv/de/lv/872758?m=224525&pc=334364&sm=814672&id=872758

Host Institution Campus
Free University of Berlin

Host Institution Faculty

Host Institution Degree

Host Institution Department
Institut für Informatik

Course Last Reviewed
2023-2024

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