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 Campus
Free University of Berlin

Host Institution Faculty

Host Institution Degree

Host Institution Department
Institut für Informatik

Print