COURSE DETAIL

LOGIC FOR SYSTEM ANALYSIS
Country Norway
Host Institution University of Oslo
Program(s) University of Oslo
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Computer Science
UCEAP Course Number 102
UCEAP Course Suffix
UCEAP Official Title LOGIC FOR SYSTEM ANALYSIS
UCEAP Transcript Title LOGIC SYSTM ANALYS
UCEAP Quarter Units 8.00
UCEAP Semester Units 5.30

Course Description
This course shows how logical methods can be used to model and reason about data types and distributed systems and gives a high-level introduction to distributed systems. The course therefore briefly introduces different classes of distributed systems – including transport protocols, database protocols, classic distributed algorithms, and cryptographic protocols – as well as different forms of communication and some fault tolerance. Also covered are modeling and analysis of distributed systems and an introduction to different classes of requirements of distributed systems. Equational logic and rewriting logic and the analysis tool Maude are used to formalize and reason about the systems, in addition to reasoning about properties such as termination and invariance.

Language(s) of Instruction
English

Host Institution Course Number
INF3232

Host Institution Course Title
LOGIC FOR SYSTEM ANALYSIS

Host Institution Course Details

Host Institution Campus
Mathematics and Natural Sciences

Host Institution Faculty

Host Institution Degree

Host Institution Department
Informatics

Course Last Reviewed

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