COURSE DETAIL

LOGIC AND DISCRETE STRUCTURES
Country United Kingdom - England
Host Institution University of London, Queen Mary
Program(s) University of London, Queen Mary
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Computer Science
UCEAP Course Number 149
UCEAP Course Suffix
UCEAP Official Title LOGIC AND DISCRETE STRUCTURES
UCEAP Transcript Title LOGIC&DISCRET STRUC
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

The course consists of two parts, each of fundamental importance for any serious approach to Computer Science: logic and discrete structures. Logic plays a very important role in computer architecture (logic gates), software engineering (specification and verification), programming languages (semantics, logic programming), databases (relational algebra and SQL the standard computer language for accessing and manipulating databases), artificial intelligence (automatic theorem proving), algorithms (complexity and expressiveness), and theory of computation (general notions of computability). Computer scientists use discrete mathematics to think about their subject and to communicate their ideas independently of particular computers and programs. In the course, students consider propositional logic as well as predicate calculus. Students treat propositional logic and predicate calculus as formal systems. Students learn how to produce and annotate formal proofs. As application students briefly consider the programming language Prolog.

Language(s) of Instruction
English

Host Institution Course Number
ECS407U

Host Institution Course Title
LOGIC AND DISCRETE STRUCTURES

Host Institution Course Details
https://www.qmul.ac.uk/modules/

Host Institution Campus
Queen Mary

Host Institution Faculty

Host Institution Degree

Host Institution Department
Electronic Engineering and Computer Science

Course Last Reviewed
2022-2023

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