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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