# **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 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 Campus**

Queen Mary

**Host Institution Faculty** 

**Host Institution Degree** 

Host Institution Department Electronic Engineering and Computer Science

Print