

UNIVERSITY OF CAMBRIDGE  
DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

Part IA: Structure of Papers 1 and 2 in 2023

Paper 1

Paper 2

**Section A**

*Attempt 1 question*

- 1 Foundations of Computer Science
- 2 Foundations of Computer Science

**Section B**

*Attempt 1 question*

- 3 Object-Oriented Programming
- 4 Object-Oriented Programming

**Section C**

*Attempt 1 question*

- 5 Introduction to Probability
- 6 Introduction to Probability

**Section D**

*Attempt 1 question*

- 7 Algorithms 1
- 8 Algorithms 1

**Section E**

*Attempt 1 question*

- 9 Algorithms 2
- 10 Algorithms 2

**Section A**

*Attempt 1 question*

- 1 Digital Electronics
- 2 Digital Electronics

**Section B**

*Attempt 1 question*

- 3 Operating Systems
- 4 Operating Systems

**Section C**

*Attempt 1 question*

- 5 Software and Security Engineering
- 6 Software and Security Engineering

**Section D**

*Attempt 2 questions*

- 7 Discrete Mathematics
- 8 Discrete Mathematics
- 9 Discrete Mathematics
- 10 Discrete Mathematics

*Attempt five questions on each paper. For Paper 2 answer one question from each of Sections A, B and C, and two questions from Section D*

UNIVERSITY OF CAMBRIDGE  
DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

**Part IA: Structure of Paper 3 in 2023**

**Paper 3**

**Section A**

*Attempt 1 question*

- 1 Databases
- 2 Databases

**Section B**

*Attempt 1 question*

- 3 Introduction to Graphics
- 4 Introduction to Graphics

**Section C**

*Attempt 1 question*

- 5 Interaction Design
- 6 Interaction Design

**Section D**

*Attempt 2 questions*

- 7 Machine Learning and Real-world Data
- 8 Machine Learning and Real-world Data
- 9 Machine Learning and Real-world Data

*Attempt five questions on the paper, one question from each of Sections A, B and C, and two questions from Section D*

UNIVERSITY OF CAMBRIDGE  
DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

**Part IB: Structure of Papers 4 to 7 in 2023**

**Paper 4**

- 1 Compiler Construction
- 2 Compiler Construction
- 3 Concepts in Programming Languages
- 4 Prolog
- 5 Programming in C and C++
- 6 Programming in C and C++
- 7 Cybersecurity
- 8 Cybersecurity

**Paper 5**

- 1 Computer Networking
- 2 Computer Networking
- 3 Computer Networking
- 4 Concurrent and Distributed Systems
- 5 Concurrent and Distributed Systems
- 6 Introduction to Computer Architecture
- 7 Introduction to Computer Architecture
- 8 Introduction to Computer Architecture

**Paper 6**

- 1 Complexity Theory
- 2 Complexity Theory
- 3 Computation Theory
- 4 Computation Theory
- 5 Data Science
- 6 Data Science
- 7 Logic and Proof
- 8 Logic and Proof
- 9 Semantics of Programming Languages
- 10 Semantics of Programming Languages

**Paper 7**

- 1 Artificial Intelligence
- 2 Artificial Intelligence
- 3 Economics, Law and Ethics
- 4 Economics, Law and Ethics
- 5 Formal Models of Language
- 6 Formal Models of Language
- 7 Further Graphics
- 8 Further Graphics
- 9 Further HCI
- 10 Further HCI

*Attempt any five questions on each of papers 4-7.*

UNIVERSITY OF CAMBRIDGE  
DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

**Part II: Structure of Papers 8 and 9 in 2023**

**Paper 8**

- 1 Advanced Computer Architecture
- 2 Bioinformatics
- 3 Cryptography
- 4 Denotational Semantics
- 5 E-Commerce
- 6 Hoare Logic and Model Checking
- 7 Information Theory
- 8 Machine Learning and Bayesian Inference
- 9 Optimising Compilers
- 10 Principles of Communications
- 11 Quantum Computing
- 12 Randomised Algorithms
- 13 Types

**Paper 9**

- 1 Advanced Computer Architecture
- 2 Bioinformatics
- 3 Business Studies
- 4 Cryptography
- 5 Denotational Semantics
- 6 Hoare Logic and Model Checking
- 7 Information Theory
- 8 Machine Learning and Bayesian Inference
- 9 Optimising Compilers
- 10 Principles of Communications
- 11 Quantum Computing
- 12 Randomised Algorithms
- 13 Types

*Attempt any five questions on each paper.*