

Troy High School Course Profile

Course Title: Cambridge International Computer Science AS Level

Prerequisites: PLEASE REFER TO ANNUAL REGISTRATION PRESENTATION

Course Description:

Cambridge International Computer Science AS Level makes up the first half of the Cambridge International A Level course in Computer Science and provides a foundation for the study of Computer Science at Cambridge International A Level. This course will encourage learners to meet the needs of Higher Education courses in computer science as well as twenty-first century digital employers. It encourages learners to think creatively, through applying practical programming solutions, demonstrating that they are effective users of technology.

Students entering this course should already have a mastery of the following concepts and possess the following skills:

The assumed prerequisites for entering the Cambridge AS/A Level International Computer Science 9618 course include knowledge of basic English and Algebra. A student in the Cambridge AS/A Level International Computer Science 9618 course should be comfortable with functions and the concepts found in the uses of function notation, such as $f(x) = x + 2$ and $f(x) = g(h(x))$. It is important that students and their advisers understand that any significant computer science course builds upon a foundation of mathematical reasoning that should be acquired before attempting such a course. In addition, students should be familiar with at least one high level programming language, and have experience in problem solving and algorithmic development. Students should have good self-discipline, as much of the work required for this course is assigned in advance and will require the student to work diligently on their own to complete the assignments in a timely manner.

Workload Expectations for this course (list typical amount of homework, projects, presentations, papers, etc.):

The workload expected varies by student. Much of the work can be completed during class time, however there are frequent nightly homework assignments that should not require more than 20 - 30 minutes to complete. In some cases, students may need to spend additional time outside of class to complete assignments.