IB Computer Science

Overview

Students who participate in this program will foster a better understanding of how computers work. This improved technical knowledge is vital in order to develop the computational thinking skills that are at the heart of this course. This program mirrors the rigorous course that IB offers and will help students to explore complex theoretical concepts through problem-solving. As they improve their computer skills, they will be expected to apply their programming skills to problems related to other sciences; demonstrating the importance of computer knowledge in solving real-world problems and building collaborative work ethic.

Objectives

- Foster better technical understanding of how computers work
- Enhance practical programming skills
- Develop computational thinking when tackling problems regarding programming and computer technologies
- Improve logical problem-solving skills

Structure

- Reflect on current knowledge of the range of topics that Computer Science covers and identify strengths and weaknesses
  - Develop a personalised curriculum
- Incorporate various science problems into Computer Science in order to identify the value of technical knowledge in solving real-world problems
- Spend time familiarising oneself with computer coding language
- Practice programming skills in order to develop understanding of complex theoretical concepts
- Exam practice
  - Past papers

20 hour
PROGRAM

Hour 0-1
Introduction
& Reflection

Hour 1-8
Enhance
Programming Skills

Hour 8-14
Discover & Discuss
the Use of Technical
Knowledge in
Problem Solving

Hour 14-20
Hone
& Master

Ascend NOW