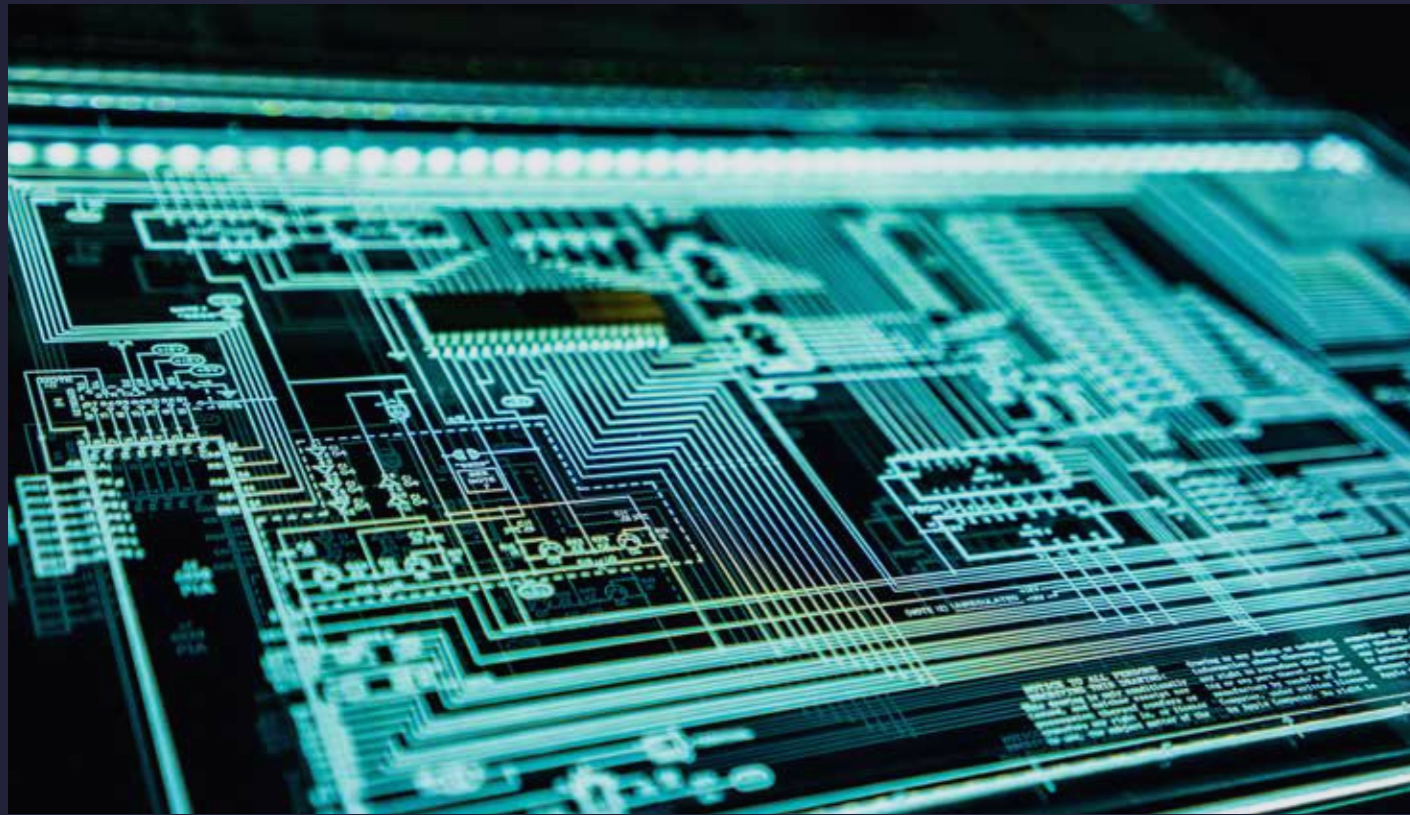




COURSE OVERVIEW

# Foundation in Computer Science and Artificial Intelligence

Eton College



## At a Glance

### SBC at Eton

Ages: 12-16

English Level: B1+

Duration: 2 weeks

#### Course Objectives:

Improve English Language Skills; Develop Computer Science Knowledge

Foundation in Computer Science and Artificial Intelligence at Eton College is designed for the tech leaders of tomorrow.

In this course, students will embark on an exciting journey into the world of computer science and artificial intelligence. They will explore the fundamentals of coding, programming, and the latest AI advancements.

Throughout the program, students will not only expand their knowledge of cutting-edge technology but also develop problem-solving skills and critical thinking essential in the digital age.

Foundation in Computer Science and Artificial Intelligence

## Sample Timetable

### WEEK ONE TIMETABLE

8:45-9:00	Morning Assembly				
9:00-10:30	<b>Computer Science</b> Introduction to Computer Science and AI	<b>Computer Science</b> Programming Fundamentals: Coding Essentials	<b>Computer Science</b> Data Structures and Algorithms	<b>Computer Science</b> Artificial Intelligence: Concepts and Applications	<b>Computer Science</b> Machine Learning and Deep Learning
11:00-12.30	<b>Time to Shine Project Lesson</b>	<b>Time to Shine Project Lesson</b>	<b>Time to Shine Project Lesson</b>	<b>Time to Shine Project Lesson</b>	<b>Time to Shine Project Lesson</b>
14.00-15.30		<b>Elective Choice</b>	<b>Elective Choice</b>	<b>Elective Choice</b>	

### WEEK TWO TIMETABLE

8:45-9:00	Morning Assembly				
9:00-10:30	<b>Computer Science</b> Computer Vision and Image Recognition	<b>Computer Science</b> Natural Language Processing and Chatbots	<b>Computer Science</b> Ethical Considerations in AI Development	<b>Computer Science</b> Robotics and Automation	<b>Computer Science</b> Capstone Project: Building an AI Application
11:00-12.30	<b>Time to Shine Project Lesson</b>	<b>Time to Shine Project Lesson</b>	<b>Time to Shine Project Lesson</b>	<b>Time to Shine Project Lesson</b>	<b>Time to Shine Project Lesson</b>
14.00-15.30		<b>Elective Choice</b>	<b>Elective Choice</b>	<b>Elective Choice</b>	



# Time to Shine

## AI Innovators' Challenge: From Concept to Prototype

How do innovators bring AI ideas to life? In this dynamic 10-hour project, Foundation in Computer Science and Artificial Intelligence students will participate in the AI Innovators' Challenge. They will work collaboratively to conceptualize and develop an AI project, creating a functional prototype.

This project is an opportunity to apply their coding and AI knowledge to real-world problem-solving.

### What You'll Learn

- ✔ Gain a comprehensive understanding of computer science, programming, and artificial intelligence.
- ✔ Dive into the world of coding, algorithm development, and AI applications.
- ✔ Engage in the stimulating AI Innovators' Challenge, where you and your peers will take an AI concept and turn it into a working prototype.
- ✔ Cultivate essential 21st-century skills, including coding proficiency, problem-solving abilities, collaboration, and creative thinking, through hands-on tech experiences.



# Electives

Expand your horizons this summer with our carefully curated elective modules. Designed to complement your core subjects and "Time to Shine" projects, these courses offer a deeper dive into unique areas of interest.

**Each week, enrich your summer school experience by opting for an elective that aligns with your interests.**



## Global Citizens

Understand global responsibility, civic participation, and the value of cultural diversity, and really discover the essence of being a good global citizen. Learn about environmental sustainability, dive into civic engagement, and gain insights into inter-cultural awareness.



## Young Leaders

Explore foundational leadership skills, from collaboration to building resilience, and uncover the traits of effective leadership. Work on team-building, establish your personal brand, and develop emotional intelligence.



## Future Innovators

Navigate the world of modern technology. Experience robotics and web programming, by delving into the basics of coding and AI, while enhancing your critical thinking and problem-solving abilities.



## Compelling Speakers

Focus on developing your public speaking skills, engage in the art of effective debating, and master conflict negotiation techniques, all the while refining your communication prowess.



## Book your place

A booking can be made online on our website [summerboardingcourses.com](https://summerboardingcourses.com)

Course places are limited so we recommend booking early. If you are booking on behalf of a family, please let us know at the time of booking.



