

## Computer Science General

<b>Year 11 Course Code</b>	GECSC
<b>Year 12 Course Code</b>	GTCS
<b>Cost</b>	\$95.00 (cost is approximate – subject to change)

### Year 11 and Year 12 Course Overview

In the Computer Science General Course students are introduced to the fundamental principles, concepts and skills within the field of computing. They learn how to diagnose and solve problems while exploring the building blocks of computing. Students explore the principles related to the creation of computer and information systems; software development; the connectivity between computers; the management of data; the development of database systems; and the moral and ethical considerations for the use of computer systems. This course provides students with the practical and technical skills that equip them to function effectively in a world where these attributes are vital for employability and daily life in a technological society.

### Year 11 Course Structure

Unit 1 – Personal use of computer systems

This unit provides students with the knowledge and skills required to use and maintain a personal computer. It introduces a formal method for developing simple information systems and databases. While considering personal needs, students examine the social, ethical and legal implications of personal computer use.

Unit 2 – Personal use of communication and information systems

This unit introduces a formal method for developing networks and internet technologies and writing a sequence of simple instructions. Students examine the social, ethical and legal implications associated with software development.

### Year 12 Course Structure

Unit 3 – Developing computer-based systems and producing spreadsheet and database solutions

The focus for this unit is on developing computer-based systems and producing spreadsheet and database solutions. Students are introduced to the internal, interrelating components of computer-based systems in an industry context. They examine a variety of systems, build on their spreadsheet and database skills and gain an appreciation of how these concepts and technologies are used in industry.

Unit 4 – Developing computer-based solutions and communications

The focus for this unit is on developing computer-based systems solutions and communications. Students are introduced to networking concepts, as applied to industry. Through the use of algorithms, students develop programming skills. Students create solutions exploring the ethical, legal and societal implications of industry-based applications.