

# Year 10 Advanced Software Development

# 10



Christ Church  
Grammar School  
PERTH, WESTERN AUSTRALIA

## COMPUTER SCIENCE

# Year 10 Advanced Software Development

## Course Outline

### 2017

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### Overview

This course is designed to offer students the opportunity to extend their software development skills in areas of their choosing.

### Semester 1

Students will work through at least 3 modules of their choice. During each unit they will complete a number of exercises to develop their skills and keep a log of their learning. They will also be expected to complete a project designed to put the skills they have learnt into practice. It is anticipated that each unit should take students 6 weeks.

Possible topics include:

- Introduction to Swift 3.0
- Object-oriented programming
- HTML5 Game development using Javascript
- Python CGI
- Recursion/Fractals

Students will also be free to choose their own topics of study in consultation with the teacher. In this case students will be expected to conduct their own research and design activities to demonstrate their learning.

### Semester 2

Students will design and create their own iOS app. This will involve the use of a structured software development process, including a detailed analysis and design to ensure a high quality product is developed.

## Assessment Outline

Unit	Assessment	Weighting	Due Date
Topic 1	Evidence of learning	4%	Term 1 Week 6
	Project	6%	Term 1 Week 6
Topic 2	Evidence of learning	4%	Term 2 Week 2
	Project	6%	Term 2 Week 2
Topic 3	Evidence of learning	4%	Term 2 Week 8
	Project	6%	Term 2 Week 8
Major Project		70%	To be confirmed