

# **Semester 1 Course Overview**

**Faculty:** e-Learning

**Subject:** Digital Technologies

Year level: 9

## **Course Outline**

The Australian Curriculum: Technology – Digital Technologies is organised into the following content descriptors:

- Knowledge and Understanding of Digital Technologies
- Process and Production Skills

### Semester 1 2022

### Unit 1: Intro to C# Programming

This unit is designed to introduce C# programming concepts to students through console programming. Although it is assumed that students have prior exposure to algorithms through both Scratch and JavaScript in Years 7 and 8, respectively, it is not a requirement. Data types, variables, input and output are among the first concepts covered, with a parallel focus on representing algorithms using both pseudocode and flowcharts being delivered throughout the unit. These skills ensure that students are gradually introduced to complex control structures, allowing for C# syntax to become a point of focus as the unit progresses.

#### Assessment - Exam

This assessment will be a written exam where students will need to recall, write and solve paper based problems. No ICTs will be used in the exam, ensuring students can accurately recall correct syntax, procedures and structure for C# console programming.

### **Unit 2: C# Application Development**

In this unit, students will use algorithms and an object oriented programming language to design and create WinForm applications to solve an identified problem. Students will use Visual Studio 2015 to develop application projects in class using the C# syntax.

Learning opportunities will include:

- Social and Ethical Issues
- Human Computer Interface Design
- Learn XAML UI layout/design language
- C# syntax using the .NET framework 4
- · Programming minor in class projects

**Assessment** – Students undertake a 60-minute exam that will test students' knowledge and understanding, investigation skills in designing applications and producing skills in code development.