Course Start

Course Start is independent learning you need to complete as a fundamental part of your introduction to the course. It should take you approximately 5 hours to complete.

Course Name	**Computer Science**
How this **Course Start** fits into the first term of the course	Our first unit is an Introduction to C#. These tasks will introduce you to some key programming techniques that you will use throughout the course.
How will my **Course Start** learning be used in lessons?	In the first 3 weeks of the course you will be referring to these key commands constantly as we learn and practise more and more C#.
Course Start learning objectives	To understand some basic programming instructions that you will then use throughout the course.
Study Skills	**Research skills** - using the guide to see an example. **Programming skills** - putting what you have learnt into practice!

Expectations for: Computer Science

Our specification is: H446 OCR A-level

What this course involves
Completing Planned Study (independent learning) of 4-5 hours per week.
Writing tasks involving a range of practice exam questions
Learning and practising programming in C#
Completing a coursework unit (20% of the A Level grade) which will entail deciding on a program idea, and then designing, building and evaluating your work.
Engaging in discussions based on the themes studied.
Studying a diverse range of topics, including: C# programming, CPU, Object Oriented programming, Databases, Networks, Search / Sort algorithms.
Developing independent learning skills (e.g. time management, preparing for each week's lessons, completing learning tasks outside lessons)

Welcome to Computer Science!

I'm so pleased to have you on the course here at Varndean.

1. Make sure you have a computer

Before we start it is essential that you organise a computer / laptop before September (it doesn't have to be anything special.) You will need it for:

- Completing and accessing homework tasks
- Practising programming
- Completing coursework

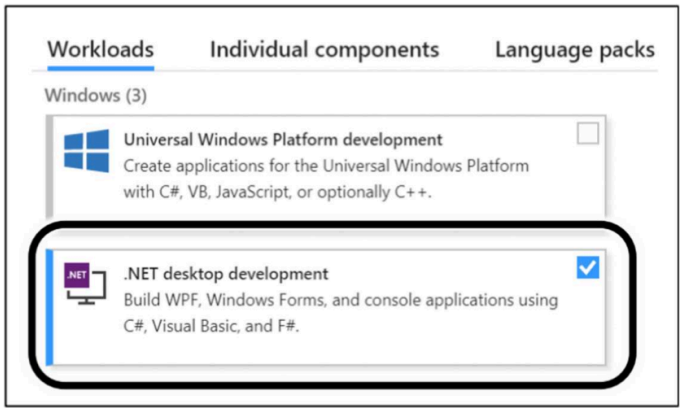
2. Before our first lesson please email your Course Start work to me: twb@varndean.ac.uk

There are three tasks below:

Task 1: Download Visual Studio

Google "Visual Studio" and download Community Edition.
It should be from visualstudio.microsoft.com

Tick the .NET desktop pack:



Task 2: Complete Chapter 1 of *Introduction to C# Programming*

Open the booklet from: tinyurl.com/VarndeanCSFlyingStart
Read each page carefully – enter the sample programs into Visual Studio and run them.

I would like to collect in the following two tasks in a Google/Word Doc. Please screenshot your code and the Console showing your program running.

Coding Task: *Program 1.2*

Try changing program 1.2 so that it reads in a first name and a surname and uses the placeholder method to produce the output.

Pseudocode

OUTPUT "What is your first name?"
INPUT first name
OUTPUT "What is your surname?"
INPUT surname
OUTPUT "Your name is" and first name and surname

Coding Task: *Program 1.3 – Retro Sales*

Study the scenario below and the pseudocode provided, then build a program in C# to calculate the total price of a car.

*Retro Sales is a local car dealership which sells a range of retro cars. It wants a program it can use to **provide customers with the total price of a new car**. **VAT is charged** at a fixed rate of 20% of the cost of the car.*

Models Sold:	Retro Original (£16,500) / Retro Panoramic (£17,500) / Retro Cabriolet (£25,000)
Trim Package Costs:	Silver (£2,500) / Gold (£1,950)
Car Tax:	£30 for 12 months