

Subject

Computer Science - Software Design and Development

Board Pearson
BTEC

Course Creative Media Practice
2019 [Specification](#)

Guided Learning Hours
540GLH

Introduction

Welcome to the Software Design and Development course. If you joined us on an open evening, you will notice that the course details have changed slightly from what was advertised. We have decided to run the BTEC Creative Media Practice 2019 qualification instead of the new BTEC RCF Subsidiary Diploma in IT.

There are a number of reasons for this, the main one being that the newer course is much better suited to software design and development, plus it comes with the added bonus of no exams!

Rest assured you will gain a qualification worth 1.5 A levels along with the associated UCAS points.

Summer Work

There are a number of things I would like you to complete over the Summer holidays

before you join us for the start of the course.

You will need to set up your 'Bring Your Own Device' (BYOD) to be usable on the course. We will be learning Linux and doing our development work on that platform.

There are a number of reasons for this:

- 95% of the Internet runs on Linux and you will be learning modern responsive app design and development
- Entry levels jobs that require Linux skills are usually paid at a higher rate than the equivalent Windows job
- Many 'DevOps' Jobs require Linux as a basic skill
- Learning Linux allows you to configure your system as you want it and understand how it's put together
- Open Source software is free meaning no cost for any programs you may need

You need to set up your BYOD to run natively in Linux. If you have a preferred Linux distribution already, you can install that on your machine. Examples include Ubuntu, PopOS and Arch.

The easy option would be to install Ubuntu or PopOS which have a graphical installer, Arch requires you to build the system from scratch using a terminal!

I will mainly use Ubuntu or PopOS to teach the classes as most people start with one of these distributions.

Task 1 **BEFORE** you start this step. Make sure you are on your BYOD device and not a PC with the family photo album on it.

THIS PROCESS WILL WIPE EVERYTHING including the rest of the families precious photos and data.

Read the installation guide at <https://ubuntu.com/download/desktop>. As expressed earlier please install natively and not in a VM.

Here is a [Youtube video](#) showing the process.

When you are ready and comfortable with the process go ahead and wipe your

BYOD Laptop and install Ubuntu (or your distribution of choice).

Make sure you select the checkbox for “Install third-party software for graphics and wifi hardware and additional media formats”. If you miss this, lots of things won’t work!

Task 2 Get familiar with the operating system, but in particular learn about the terminal. Please read through this [short document](#) and try out some commands.

The book above is written for the Raspberry Pi which runs Raspian Linux, but the commands work on all versions of Linux. Once you have read the document, watch this [video](#) to consolidate your learning.

Task 3 We will be using a piece of software called Git to manage our software library. I’ll leave the story of why it’s called that until we are in the classroom.

Please have a read through this [book](#) and get an idea of what Git is and what it’s capable of.

If you have been programming in Python, have a go at uploading your software files to [Github](#). When you create a Github account make sure you use a professional username as this account will follow you around for your job hunting and future working life.

I look forward to seeing you when we return to the classroom. If you have any queries you can email me at cchambers@salisbury6c.ac.uk .