



Crash Course Computer Science Preview

Crash Course: Computer Science

<https://youtube.com/watch?v=tplctyqH29Q>

<https://nerdfighteria.info/v/tplctyqH29Q>

Hello world, I'm Carrie Anne Philbin, And welcome to crash course computer science.

So, computers really have allowed us to do some pretty amazing things. Think global telecommunications, international commerce, global transportation, breakthroughs in medicine distributed education.

Online shopping, online dating, just the Internet in general. (Sound of MoDem.) Computers are allowing us to explore our own world and other worlds and of course some seemingly mundane things, like permitting us to spy on our pets from work, or communicating with our friends in a nearly indecipherable stream of emoji. Don't call computers magical. They are not, I repeat, are not magical.

So, before we get into what we're going to talk about in this series, it might be useful to tell you what we are not going to talk about. We aren't going to teach you how to program. Programming is a really crucial aspect of computer science, and we will get to the rules that guide the logical of hardware and software design.

But we aren't going to teach you how to program an Arduino to water your plant, or how to change the CSS on your grandmas sewing blog so visitors curses turn into kittens. This also isn't a computing course or at least how computing is thought of in the US. Computing here is a goal. It's what computers do.

And we'll talk about some of that for sure. But our goal for this course is much broader. But computing means other things in other countries, it's all pretty confusing, but what we are going to look at, are the history of computers.

Even before we had electricity. We are going to retrace the design decisions that have given us our present-day components. We're going to talk about how operating systems work or don't work.

How the YouTubes get to you over the Internet. How are smart phones and other smart devices are getting smarter. And of course mysterious futuristic stuff like quantum computing and frustrating present day stuff like hacking.

It's a lot to cover. I suppose before we get started, I should introduce myself. I'm Carrie Anne Philbin.

Hello! I'm an award winning computing teacher. Author of 'Adventures in Raspberry Pi'. And the creator of the YouTube video series for teenagers called the Geek Girl Diaries, which includes stuff like interviews with women working in technology, computer science-based tutorials, and hands on digital-maker style projects.

In my day job, I hope people learn about technology and how to make things with computers as director of education for the Raspberry Pi foundation, which is a charity based in Cambridge in the UK. Needless to say, I am passionate about this stuff, but not because computers are these amazing devices that are always making our lives easier. Sometimes that's debatable.

But because computers inarguably have become pivotal in our society. From our cars and thermostats, to pacemakers and cell phones computers everywhere. And it's my hope, that by the end of this course, you'll have a better understanding and appreciation for how far we have come and how far they may take us.

I'll see you next week.