CyberFirst Podcasts

An inside view of Cyberfirst: Degree apprentice edition transcript

[00:00:00] Michala: You're coming to the end of college or sixth form, and it's time to make the crucial decision of where to take your next step. Is university on the cards for you, or would you prefer to get that hands-on experience from the get-go? What if you want to do both? Our podcast created by CyberFirst is here to guide you. In today's episode, we're explaining exactly what you could get up to on the CyberFirst degree apprenticeship and giving you some firsthand insight from the apprentices themselves. I'm Michala, a CSO advisor and information governance and cybersecurity consultant and today I'm joined by--

[00:00:35] Elena: Hi, I'm Elena, I'm a third-year cybersecurity apprentice on the CyberFirst scheme.

[00:00:41] Tom: Hello, I'm Tom. I'm also a degree apprentice.

[00:00:44] Kitty: I'm Kitty, I'm also a CyberFirst apprentice.

[00:00:47] Michala: CyberFirst degree apprenticeships are open to everyone, but sometimes people are held back from applying because they don't really know what the program entails. The reality is that you'll get hands-on experience, study for a degree, and have constant support throughout it all, but what does this look like in practice? To kick things off, our guests are going to give us some insight into why they pursue this opportunity with CyberFirst. Tom, would you like to kick us off?

[00:01:15] Tom: The experience of getting to work in the industry at one of the leading organizations was a big draw for me, but also I really liked the appeal of earning as you learn.

[00:01:24] Michala: How about you, Elena?

[00:01:26] Elena: For me, it was very similar. I am a very practical learner and a practical person. I thought that it made a lot more sense for me to get into industry as soon as possible, rather than just having to sit in lectures all day every day. This has been the perfect opportunity for me to be able to learn in a way that I really enjoy and also, obviously, who we work for, it's just a fantastic opportunity.

[00:01:52] Michala: Yes, indeed. It's actually amazing. How about you, Kitty?

[00:01:55] Kitty: What I really wanted was to get the experience of a business world, but I also wanted to earn, but also get a degree. This combined both of them and got to really just do something I enjoy.

[00:02:07] Michala: I have to say as the employer, it's really wonderful to have people coming up through with that hands-on experience. It's great to understand why you initially chose to pursue a degree apprenticeship with CyberFirst, but now let's have a chat about your experience since joining the program. Elena, would you like to kick us off this time?

[00:02:24] Elena: Yes, the last three years have just been more than I ever could have imagined. The combination of being in such close quarters learning environment as well, having such a small cohort and being able to have one-on-one time with the lecturers has been great and also all of the placements that I've had, I've been fortunate enough to be in some really amazing teams doing some really amazing work. That has been just incredible. I know that it isn't something that I would have been able to have done had it not been for CyberFirst.

[00:02:58] Michala: You mentioned about being part of a cohort. What size is that? Can you tell us a little bit about that and how you work together?

[00:03:05] Elena: There's about 60 people in my year and we're then split into several smaller cohorts when we do the learning. There's only 10, 15 of us in each group when we do lectures. It just means that we really get that quality time with the lecturers.

[00:03:24] Michala: With each other as well, it sounds like.

[00:03:26] Elena: Absolutely.

[00:03:28] Michala: How about you, Tom?

[00:03:30] Tom: The work they do really makes you push your abilities and because you get the constant support, no matter how difficult you might feel it is at the start, you'll always get a good reward at the end. That's the same both on the degree side and when you're actually on the real placements, there's constant support from all angles.

[00:03:47] Michala: Do you find that they also actually learn from you as well, even though they're more experienced?

[00:03:53] Tom: Yes, because anyone that comes into a business, they'll have fresh ideas, fresh way of looking at things and sometimes it can really change the way you might approach something.

[00:04:01] Michala: How about you, Kitty?

[00:04:03] Kitty: My experience has been really good so far. I started and there was only one or two people in my university lectures who hadn't coded before and I was one of them. I've been able to learn so much since I've started and just gotten so much experience. I've really enjoyed it.

[00:04:18] Michala: That's really interesting. How did you find actually doing the coding as somebody who hadn't done it before?

[00:04:24] Kitty: At first it was quite a struggle. It was so new that everyone else around you knew, but the support you got and just sometimes it helps in the business world to have actually a purpose to code really helps you to learn because you feel like you're making use of your skills rather than learn it because you have to.

[00:04:40] Michala: Absolutely. It's about contributing to the purpose, isn't it? Understanding the why. I would just say for anyone that's listening, that whilst you will learn to code on the course, in terms of having a career in cyber security, there's lots of different roles, so you don't necessarily have to code in your long-term career. I can't code, for example. Along with all of your hands-on work at CyberFirst, you also study for a cyber security degree and many students don't realize that the accredited qualifications are actually part of this program. It would be really good if you could tell the audience some more. What kinds of things have you actually learned during your degree and how do you balance your work and studies? Kitty, would you like to kick us off on this one?

[00:05:28] Kitty: Yes. You'd learn anything you'd normally learn at university. You do the program like we said before, but you also learn networks and databases. You do learn as though you would a normal degree. You do four weeks a module, all in one go and two or three modules at a time, then you go back into the business.

[00:05:49] Michala: How about you, Tom, how have you found that approach?

[00:05:52] Tom: I found it really good, especially with the lecture side to the blocks, you get your first three days of the week for your lectures and your modules and your exercises. Then the final two days there for independent study and revision. That means you have plenty of time to make sure that you can learn the content before you do the exams.

[00:06:09] Michala: In terms of independent study, is that something that you tend to do within your cohorts or is it literally just you as an individual?

[00:06:18] Tom: It's entirely up to you. Some people work in separate teams within the cohort with people they work well with, some like to do independent and other people might have a random study buddy that they'll choose for a draw and then they'll work together to do a little bit of work.

[00:06:33] Michala: Oh, really interesting. Cool. Basically, you can do whatever really works for you. How about you, Elena?

[00:06:41] Elena: Yes, I mean, I found it all so fascinating. I think it's all just been so new to me and there's a lot of really modern theories and stuff as well that you look up. We've got stuff on cloud computing, which was a really, really interesting module that we did during the third year. During the third year, you're in the workplace for the entirety of it but you still get a day a week to do any of the modules that you're currently on, but then the modules are spaced out over about three months.

You still get plenty of time. You're not having to work in the evenings and the weekends and stuff, and you get loads of support from both your placement teams and also from the university and the study support teams as well. I never felt like there wasn't somebody for me to turn to if I were struggling with the uni stuff.

[00:07:34] Michala: Oh, that's brilliant, you're almost making me wish that I could go back in time and do this.

[00:07:38] Inerviewer: Okay. Let's just have a bit of a quick fire round to see just how much you have learned on this course then, as over the game of true or false, I'm going to read a statement and I want you to tell me if it's true or false and then explain why. Are you ready? Apprenticeships are for people who don't do well at school?

[00:08:01] Tom: False. I'd say that because apprenticeships are for people of any background in any education and it doesn't matter what grades you've got. If you've got the right mindset to learn and you've got the right drive and passion, then you'll succeed in whatever apprenticeship you choose to do.

[00:08:17] Michala: Perfect. The next one. Working in cyber security means you'll help protect the nation.

[00:08:24] Kitty: True. I'm going to go with true because everything you do, you're trying to defend from attacks and people trying to get access to your systems. It's quite a good job. You're helping to defend infrastructure and that nationally.

[00:08:36] Michala: Yes, absolutely. Never more so important than before, really, I'd say. Going to university does open more doors than an apprenticeship will, apparently. Is that true or false?

[00:08:49] Elena: No, that's definitely false. Sure, university's great if it's for you but I think there is a lot of stigma that apprenticeships, they do close doors when they absolutely don't. Even within our organization, there's so much that you can do as an apprentice and so many things apprentices have gone to do. As well, you still have a degree at the end of the day, but you have that hands-on experience. If you want to go out to industry, they're almost going to be more keen to have you because you have then got three years of experience in the workplace as well.

[00:09:21] Michala: Okay. Next one, Apprenticeships are only for school leavers.

[00:09:27] Kitty: That's false. In our cohort, we've got people who have gone to university, dropped out to join this scheme, and we've had people coming with a degree or people who are changing careers. It's really open to everyone.

[00:09:39] Michala: That's brilliant. There are numerous career paths to explore in cyber security, true or false?

[00:09:46] Tom: True. There's so many different variations of what you could do. It could be technical, it could be non-technical. It doesn't just have to be programming or coding. There's many, many other aspects that you could be doing.

[00:10:00] Michala: Absolutely. When I ask this, I always explain that there's easily over 50 sort of subdisciplines within cybersecurity. No matter what you're interested in, there'll be something for you. The final one, cybersecurity organizations only hire a certain type of person.

[00:10:19] Elena: Yes, that's absolutely false. I think it's agreed, hopefully, by everybody, that everybody has always got something different to bring to the plate. I think cyber security has always been seen as, "Oh, it's something for boys," or, "It's for white middle-aged men in suits," but it's not. There's so much to cyber security, there's so much to explore, there's so much to enjoy. It's for absolutely everybody, and everybody is going to bring something different because everybody's got a different background. We're not all the same person.

[00:10:52] Michala: Now that we know a bit more about the reality of being an apprentice, let's chat about the impact you're able to create right from the start of your cybersecurity career. Elena, could you give us some insight into the kind of work you're doing as a degree apprentice, and how you're creating an impact.

[00:11:09] Elena: I've been fortunate enough to have had four amazing placements while I've been on CyberFirst. Obviously, due to the nature of some of the work, I can't really talk about them too much. I've been able to do software dev, I've done networking, I've done hardware stuff, which I'm doing in a minute, which has just been so interesting. It's that sort of more hardware, technical hands-on, like electronic stuff that I think a lot of people don't think is classed as cyber security.

I think all you hear is software and networking, and all of that other jargon that you actually then forget about the core part which is the hardware that you use, your phones, your computers, even your printers, your smart fridges. Everything needs to be secure. Being able to work and looking at that aspect of cyber security over the last year has been so interesting.

[00:12:07] Tom: The placements that I've been on, they don't just create you a fake task, which will go in the bin afterwards. They make you do the real work that they're also doing, which is really good because every piece of work you'll do and you know that it has an impact to someone else down the line.

[00:12:21] Kitty: Yes. I've been really lucky on my placements. I've got really interested in tasks to be doing. My team approached me with something that they'd wanted for a long time but hadn't had the chance to do themselves just because of time. They just approached me and was like, "Can you help us automate some of our processes?" I've been really lucky that I've managed to help them and change the way that they work due to my work on placement.

[00:12:44] Michala: That's wonderful. I'm so pleased to hear you say that. As a degree apprentice, you will be supported at every step to help you get your cyber security career off to a successful start. How were you supported to ensure you never felt lost in the crowd? What was the day-to-day support like to ensure you felt comfortable and confident in developing your skills?

[00:13:05] Tom: For me, it was when I went on my first placement having no previous experience doing cyber security. I was really lucky to be given one-to-one training with one of the team members. That was a week training course, where they worked with me side by

side to work through all the basic material that would set me up. After that, I felt confident enough to dive in and go straight ahead.

[00:13:24] Kitty: I think you're always supported. The whole point of the apprenticeship is not to expect results when you go on placement and learning. As long as you're learning, even if it doesn't succeed, if you've learnt from that, then they're happy. I think that's the big thing about feeling supported, is you've got no expectations to succeed, they just want you to learn and grow as a person. That helps you feel more confident to try new things and just experiment because no worry of failure.

[00:13:50] Elena: I too have been really fortunate to have had really great teams on my placements. Most recently I was chucked in the deep end. I went into a team that I had never had any experience in before, I'd never done any even real learning about some of the topics that they wanted me to work on. They put in so much time and so much care and so much effort into just making sure that I knew what I was doing, what I was meant to be doing, I knew what theory behind it, by just sitting down with me and never making me feel stupid for asking what I thought was stupid questions, because there is no such thing as a stupid question. They were fantastic about that.

[00:14:33] Michala: Yes. That's so important. I always say that one of the key things in terms of traits that I look for in prospective staff is the curiosity and the confidence to ask questions because that's how you learn, but I'm afraid that the time has just flown by. That's actually all we've got time for in this episode, but if you're listening and you want to know more about the CyberFirst degree apprenticeship, you can take a deep dive on the website at www.cyberfirstcareers.co.uk, where you can learn more about the CyberFirst university bursary scheme as well. You can tune in for that on another episode. Thanks again to all our guests and thanks to you for listening as we open up the wonderful world of cybersecurity.

[00:15:18] [END OF AUDIO]