

Control Techniques' Ed Peate reflects on how the E3 Academy gave him a career head start

Ed Peate, a power electronics development engineer at Control Techniques, speaks about his experience of starting his career through the E3 Academy, a UK non-profit organisation that develops electrical engineering talent by matching sponsor companies with young students after A-levels.

Today, Ed works as a power electronic development engineer with almost six years of experience under his belt, and his skills are in high demand. Electrical engineering is one of the five best-paid graduate roles. However, while the number of engineering graduates is rising overall, the number of new electrical engineers has not. This has created a skills gap, creating a competitive landscape for recruitment and retention of engineers like him. Having signed up with Control Techniques as a sponsored student in 2012 and joining as a graduate in 2016, Ed's relationship with his employer has lasted a decade and both are reaping rewards.

Getting started

"Hearing about the E3 Academy was a bit of an accident," says Ed. "I got hold of an E3 Academy pamphlet at the University of Nottingham. The benefits of applying to the scheme were immediately clear, both in terms of the financial support and the safety of having a job lined up at the end of university."



"The whole application process was very straightforward. It took, at most, half a day to write the application. After interviews with a couple of employers, I was swayed to join Control Techniques – it was a genuinely nice and welcoming interview process and included a sociable visit to the pub, and I knew I'd fit in well."

"Obviously, the funding made a big difference to me. But most importantly, in my final year, when everyone else was rushing around trying to find a job, I was able to focus completely on my studies and passing my exams. Rather than spending a considerable chunk of my time trying to convince potential employers I knew what I was talking about, I could just dedicate all my time to fully understanding the course material and actually knowing what I was talking about."

During university

Besides allowing students to focus on their studies, the E3 Academy provides a channel for partner companies to have regular, scheduled catch-ups with their sponsored students throughout their time at university, providing an opportunity for students to update on their performance and wellbeing. It's also an opportunity for partner companies to encourage students to choose relevant modules to set them up for their



future career. So, partners can really guide and mould their talent from a young age through their education.

However, perhaps the biggest attraction for companies and scholars alike is the eight-week summer work placements at the sponsoring companies. These enable students to develop the necessary soft and hard skills to succeed in the business, for example by enabling them to develop a professional network and map out a future career path. Conversely, for the hiring company, it's like having a six-month interview process to build rapport and take risk out of recruitment.

“Being able to talk to people who knew lots more than I did was enlightening, especially since you think you know everything at that age. I was able to network and foster relationships with other scholars and my partner company, while also playing around in the workshop. It was good to put my mind to something which actually generated value.

“For example, I spent one summer investigating electrical filters, identifying designs and manufacturing processes that could be used to improve the product cost. The next summer I was part of a team investigating circuits to identify the root cause of a problem reported by a customer. We eventually found the issue and submitted a patch in the software to fix it. It gave me a very strong sense of satisfaction and, from that point on, I couldn't wait to finish University and start full-time.”

Developing a career

Ed is currently developing through the ranks at Control Techniques, “I do a lot of problem-solving in industrial automation to find new ways of doing something that improves its cost or makes it smaller. My job is to do things that have never been done before by combining high-power and high-current components – like finding ways of condensing circuits into smaller and smaller spaces while keeping manufacturing costs down.

“A problem can sometimes seem almost impossible at the start, so it gives a real sense of achievement to find a solution. Those days go fast and keep you sharp as engineer, it's almost like being in a meditative state.”

The role is one that calls for a stream of young people with curiosity, enthusiasm and an ability to fit into the team. For Control Techniques, it also helps if young engineers also enjoy outdoors pursuits. The company is located in rural Wales, making it an excellent springboard for outdoor adventures.

Giving back

Having been through the process himself, Ed is now paying back through membership of the E3 Council and applying the skills he has gained as a hiring manager at Control Techniques to assess and put forward the best of a new generation of candidates to its partners.

Commenting on the skills gap, he said: “There is an industry-wide shortage at the moment. While there is a push to get people in, it still takes a while to fill gaps. The E3 is the perfect solution. The individuals we hire from the scheme are some of the best at their age, so teaming that with a very early introduction into their employer means they are trained from the start rather than bolting a career onto the end of the course.

“The Academy means that young engineers are trained from the start of their studies. I felt like an actual part of the company, especially when I walked in on my first day after graduating and already knew everyone's name. When you're part of the scheme, everything you do at University is geared towards being able to produce value for that partner company

at the end of it. Things like this don't happen if you're not on a scheme like E3. It benefits both the student and the sponsor."

Get in touch if you would like to hear more about partnering with the Academy - manager@E3Academy.org