Career development

Going the extracurricular mile

Getting experience beyond your core academic activities is crucial if you want to bag that dream job after graduating, as Institute of Physics careers manager Vishanti Fox explains.

Gaining a degree in physics is no mean feat. As a student, you’re busy completing lots of assignments in many different modules, and tackling experiments in the lab too. So it isn’t surprising that, for most students, extracurricular activities often fall into a black hole of “things you don’t have time for”. However, having a rich life outside your core academic activities is vital when it comes to helping you figure out what you want to do after you graduate, and getting the right job.

While good grades are important, students also need a broad range of transferable skills. This includes learning prioritization, communication, teamwork and problem solving; taking initiative, showing resilience and leadership; and developing business acumen and skills such as negotiation and persuasion. The need for transferable skills isn’t limited to jobs in industry – you’ll need these skills even if you want to build an academic career.

Indeed, in my experience of working with companies that hire physicists, the most employable graduates are those who engage in extracurricular activities. By doing so, students are exposed to new and challenging environments, which builds their confidence, and often leads to further opportunities.

Such extracurricular activities include not only part-time jobs, summer placements and internships, but also everything from coaching, tutoring and managing your physics society to sitting on a committee, contributing to a special-interest group, organizing events or volunteering. By participating in these activities, you are, consciously or unconsciously, preparing yourself for the next stage in your life, wherever this takes you.

Taking up a placement or internship, especially in a field or company that you may want to work for, is a particularly good idea. There are many ways to go about this. While you can find a placement or internship under your own steam, there are many resources in place to help. For a start, speak to your careers adviser or tutor, who can point you in the right direction. The Institute of Physics (IOP) also offers a number of opportunities to help you gain experience and develop those all-important transferable skills (see box on p10). A handful of graduate training programmes have even been officially accredited by the IOP, all of which combine dedicated events, training modules, professional development, mentoring and on-the-job experience.

The IOP currently works with 21 companies, from Atkins and Leonardo to EDF and Sellafield, which deliver graduate training programmes for physics students, through the Accreditation of Company Training Schemes (ACTS). Accreditation indicates that the training scheme has the appropriate criteria for physicists working towards gaining professional registered status.

The message is clear – transferable skills are essential. But instead of trying to convince you any further myself, here are some case studies of physics graduates who have taken up a host of placement and volunteering activities.

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I’m currently studying for an MPhys in physics, astrophysics and cosmology at the University of Portsmouth, UK.

During my second year, I decided to apply for South East Physics Network (SEPnet) placements, after learning about the organization at a careers day at university. SEPnet links university physics departments in south-east England and organizes summer placements for physics undergraduates and PhD students to develop their employability skills and raise awareness of their career options in business and industry. I looked through the profiles of more than 60 placements and applied for five, but it was the placement at Winchester Science Centre that caught my eye, as I’m thinking about going into teaching. Thankfully, the interview went really well and I was offered the job. I was really nervous to start with as this was my first job in the science industry, but the team was very welcoming, and I got settled in quickly.

My placement at Winchester was split into two parts: being an “inspirer” and evaluating an exhibit. Most of my time was spent on the former, which involved science busking, floor walking around the exhibits and presenting the live science show. My project involved evaluat-