Systems Engineering

Technology is integral to the world of work and further learning, which explains why there are so many opportunities open to you. Some may wish to remain within a technical department, while others may wish to work as part of a project management team whereby you interface with other professionals such as designers and electronic engineers. This will mean you will have to utilize both technical and non-technical language. The IT and Information Services sector provides a raft of opportunities you can pursue. Some of you may wish to maintain the link with your subject. Whilst others might focus on making a contribution in other ways which can be achieved in the Charities and Voluntary sector, or in Teaching and Education where making a difference matters.

Others may choose to branch away and discover opportunities in government organisations in the Public Sector; such as the Government Digital Service, GCHQ and the Government Communication Centre. Alternatively you may be interested in managing large systems in Financial Service organisations or Banking. Other sectors of interest to Systems Engineering students include: Pharmaceuticals, Automobile Manufacturing, and Retail and Energy firms. Look at the Prospects job sector pages or Inside Careers for further information on alternative business sectors.

Roles

Each job title links through to a broad job description, salary and conditions, entry requirements, typical recruiters and links to further pre-assessed useful information.

- Artificial Intelligence
- Systems Developer
- Electronics Engineer
- Games Developer
- Database Administrator
- Technical Author
- IT Sales Professional
- Quality Manager
- Manufacturing Systems Engineer
- Patent Work

Finding Opportunities

Some of the roles above require no further study; however there are clear exceptions in the fields of Teaching, Artificial Intelligence and Patent work. These may require either full or part time study. Teachers can also qualify through SCITT which focuses on ‘on the job’ training or through Schools Direct which combines study and practical experience.

Placements and work experience can enhance your employability and there are placement officers within the school that can help.

If you have technical skills, but want to develop business acumen then a Masters course may enable you to do this. However some companies will achieve this through internal company training. There is the opportunity to combine learning and earning through the Knowledge Transfer Partnership (KTP). On this scheme, you would spend four days with a Small to Medium Enterprise (SME) and a day a week undertaking further study.

Some Masters Programmes are conversion courses, allowing non-cognitive students to gather the skills and knowledge obtained from a first degree, whilst other courses allow further specialisation. There are both taught and research based programmes on offer to students in this sector.
Some of these areas are highly competitive; both in terms of jobs and post graduate programmes. For many opportunities speculative applications are required as many jobs are not always advertised. Helpful links for jobs and placements include:

- Electronic Engineer
- GCHQ
- IT International Jobs
- The IT Job Board
- Computer Weekly

Further Reading

- New Scientist Online
- The Artificial Intelligence Society
- Robotics Jobs