

Careers and Employability Service Additional resources and information for

ECS students

Use for career choices, job search and sector research.

Welcome:

This download is designed to help ECS students research job sectors and find work experience or graduate jobs.

ECS has well established links with local, national and international employers and organisations. An extensive range of presentations and workshops are organised by your Faculty, ECS student societies, particularly IEEE and ECSS, and the Careers and Employability Service, providing you with insights into employers, possible job options and how to apply effectively.

Use the Careers and Employability website as your starting point for work experience, job search, and career planning <u>www.southampton.ac.uk/careers</u>. When applying for vacancies you may need advice on constructing a CV, filling out an Application Form, drafting a Cover Letter or preparing for Interview. And you can get personal help or feedback through our <u>Drop-in service</u>.

Document Index (Quick Links):

This document has handy hyperlinks to help you navigate around it if you view in an electronic format.

- Finding Job Vacancies advice on job hunting and research
- **<u>ECS Related Jobs and Internships</u>** ECS jobs board links
- **Employment** Example jobs taken by ECS graduates (by sector)
- Key Occupational Information Professional bodies (by sector)
- **<u>Further Study</u>** Example postgraduate programmes taken by ECS students

Finding Job Vacancies:

As a graduate from ECS you can go into a wide range of occupations. General information and advice about how to find out about employment opportunities can be found on the Careers Service Job Hunting webpages and on the Prospects website.

Employers approach both your Faculty and the University Careers Service in order to meet and recruit ECS students. On campus, these companies advertise their vacancies via

- **Mycareer**, the careers service jobs and events board, <u>https://mycareer.soton.ac.uk/home.html</u> – register your preferences to get relevant alerts.
- **FPSE Careers Hub**, <u>http://www.ecs.soton.ac.uk/careers</u>, includes listings of Affiliated and Laureate Companies as well as current vacancies. Joyce Lewis from the Faculty will email updates regularly.

Employers attend careers fairs at the University, including the <u>FPSE Engineering and</u> <u>Technology Careers Fair</u> in February and the <u>IT, Science and Engineering Careers Fair</u> in October. The Careers Service organises several other careers fairs, see <u>website</u> for details. Take some advice from one of our previous graduates who says:

"Consider a wide range of firms. Less well-known companies might be a leader in areas that you are interested in. Using contacts in a particular location or business sector and attending careers fairs are great ways to discover a good firm."

There are specialist websites for students and graduates giving insights into career options, key employers and vacancy listings:

Prospects.ac.uk includes information and advice covering: Your skills, job options, career areas, further study, case studies, typical employers and job search sites. The generic job descriptions linked to each degree area are very useful for understanding the different opportunities open to you and what employers will be looking for in your CV and application.

- For job options with Computer Science / IT
- For job options with Electrical and Electronic Engineering
- For job options related to Information Systems
- For job options related to Web design and Development

Targetjobs.co.uk provides insights into **Technology** job options such as Cyber Security, Games Development, Financial Services, Web development <u>https://targetjobs.co.uk/careersectors/it-and-technology/advice/specialisms</u> and **Engineering Specialisms** such as Aerospace, Automotive, Electronic, Energy, Telecommunications, etc. <u>https://targetjobs.co.uk/career-sectors/engineering/advice/specialisms</u>

Gradcracker.com is primarily a jobs board for students in technical (STEM) subjects You can follow companies, upload your CV, and search or filter vacancies on a wide range of parameters. <u>http://www.gradcracker.com/</u>

InsideCareers.co.uk specialise in Patent Attorney work <u>http://ipcareers.co.uk</u> and Technology in Finance and Consultancy <u>http://www.insidecareers.co.uk/professions/it/</u>

Inside Careers, Gradcracker and Targetjobs often attend careers fairs and have free directories which you can collect from the Careers Service in Building 37.

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ECS Related Jobs and Internships:

Most ECS students go into careers directly related to their field of study. If you're not sure what career is right for you, the <u>Career Planning</u> pages of the Careers Service website can help, or you might find it helpful to talk to a member of our <u>staff</u> using the Drop-in service.

Work experience is increasingly essential to help secure graduate positions. Relevant work experience is particularly valuable, but any work experience, such as in catering, experience gained through clubs, societies and <u>volunteering</u>, or Faculty projects and research groups also develops skills valued by employers, and will help you succeed in the recruitment process.

Make the most of the opportunities provided by the University to meet and network with alumni from ECS at the University of Southampton, particularly the FPSE Engineering and Technology Careers Fair, and learn from their experiences:

- See the <u>Welcome</u> section above.
- **Excel Southampton Internship Programme** Paid opportunities during term and vacations. New posts advertised each month on Mycareer.
- **Business Innovation Programme** multi-disciplinary teams of 4 students work on real business projects for 8 weeks in term time. Training provided by IBM.
- Details of Excel Southampton, Business Innovation Programme and Volunteering opportunities on the <u>Careers and Employability website</u>.

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Employment:

Most graduates from ECS move into jobs where their technical skills and degree content are very relevant. Sometimes the specific degree is a requirement, but there is considerable overlap between the job titles and groupings, and many employers recruit across all or several programmes of study. Self-employment is another option, often used in the IT industry to exploit or cope with the peaks and toughs in demand.

The examples on the following pages give a sense of the kinds of jobs graduates from ECS are doing six months after graduation (data collected from 2011 onwards). These are examples of employers, not the full list – see also the Affiliated and Laureate companies on the ECS Careers Hub and Employers listed on the Mycareer jobs board.

Scientific Research and Development (often following a Postgraduate course or PhD):

- Research or teaching posts at the University of Southampton or other universities in the UK or overseas
- Research posts in national institutions
- Research posts at institutions such as:
 - o EUROLCDS
 - National Physical Laboratory
 - o Roke Manor Research Ltd (Chemring)
 - o Science & Technology Facilities Council
- Knowledge Transfer graduate <u>www.ktponline.org.uk</u>

Electrical and Electromechanical Engineering

- Electrical Engineer, Mechanical Engineer, High Voltage Electrical Engineer, Design Engineer, Power Systems Engineer, Graduate Engineer
 - o Allied Motion
 - o Armed Forces and Ministry of Defence
 - o Arup
 - o Centrax Industries
 - Mott MacDonald
 - o ABB Ltd
 - o Addject

- o Al Maimani Red Bricks
- o Bermuda Elctric Light Company
- o Cisco Systems
- o Hitachi –GE Nuclear Energy
- o JVCKenwood Singapore Pte Ltd
- Mitsubishi Electric Europe
- Newgen Electrical
- o Schneider Electric
- o Siemens
- o Tenaga Nasional Berhad
- o UK Power Networks
- o Unipart Rail
- Western Power Distribution

Electronics:

- Graduate Engineer, Hardware Engineer, Electronic Engineer, Embedded Firmware Engineer, Consulting Engineer, Automation Engineer, Microelectronics Engineer, Test Engineer, Project Engineer
 - o ARM
 - o Atmel Corporation
 - o Audi
 - o BAE Systems
 - o Cambridge Consultants
 - o Cambridge Design Partnership
 - o Dialog Semiconductor Ltd
 - o Dyson
 - o Echo Electronic Co Ltd
 - o Horizon Nuclear Power
 - o Jaguar Landrover
 - o Lascar Electronics
 - o Network Rail
 - o Parkeon
 - o Rapid Product Development International
 - o Rolls Royce
 - o Science and Technology Facilities Council (STFC)
 - o Selex-ES
 - o Siemens
 - o Spreadrun Communications Inc
 - o Surface Technology International
 - o Zethon ltd

Power generation, distribution and energy:

- o British Power International
- Culham Centre for Fusion Energy
- o Edif ERA
- Hitachi-GE Nuclear Energy
- o Horizon Nuclear Power
- o Junifer Systems

- o National Grid
- o Navetas Energy Management
- o Quantum Basics
- o SP Energy Networks
- Western Power Distribution
- UK Power Networks

Programming, systems analysis and software engineering:

- Internet Services Developer, Web Developer
 - o Acturis
 - Buckle Consulting
 - European Dynamics SA
 - o Logycom
 - Message Digital Design Ltd
 - Moore Wilson
 - o Netcraft
 - o Pay 4 Later
 - o Pebble Beach Systems
 - o Triggered Messaging
 - Unboxed Consulting
- Software Developer, Graduate Developer, Application Developer, Developer, Programmer, Financial Software Developer, Front End Programmer, Backend Developer, Web Developer
 - o Adbrain
 - o Axomic
 - o BAE Systems
 - o Beatnik Games
 - o Blizzworx Ltd
 - o Bloomberg
 - o Boss Alien
 - o BSkyB
 - o BT
 - o Buckle Consulting
 - o Clicktools
 - o Corefiling Ltd
 - o Credit Suisse
 - o CSIS
 - o Emery Ltd
 - o Fidessa
 - o Flywalk Ltd
 - o Gamma Telecom
 - o Goldman Sachs
 - o Huddle
 - o Innovise IES
 - o Javelin Group
 - o JP Morgan Chase & Co
 - o Junari

- o LBI
- o McLaren Applied Technologies
- o Media Molecule
- o Message Digital Design
- o Micro Focus Ltd
- o Multimedia LLC
- o Mippin
- o Netcraft
- o Okado
- o Omniphone
- o OneIS
- o Parkeon Transit Ltd
- o Pebble
- o Pi-top
- o School Apps
- o Snowflake Software
- o Sony
- o Sword APACK
- o Twistplay Ltd
- o Wazoku
- o Yahoo
- Software Engineer, Graduate Software Engineer, Software Development Engineer, Senior Software Engineer, ASIC Engineer
 - o Amadeus
 - o Amazon
 - o ARM
 - o Avantest
 - o BAE Systems Detica
 - o Bubble Automation
 - o Caplin Systems Ltd
 - o Chemring Technology Solutions
 - o Cisco
 - o Critical Software
 - o Cyberscience Plc
 - o Delcam
 - o Ericsson, Ericsson China
 - o Factset
 - o Google
 - o IBM
 - o IG Group
 - o Imagination Technologies
 - o L-3 Communications
 - o Minerva Networks EDC
 - o Microfocus International
 - o Microsoft
 - o Moody's Analytics
 - o New Voice Media
 - o Offshore Systems UK
 - o Roke Manor Research Ltd

- Shenzhen MinDe Electronics Technology
- Software Imaging Ltd
- Suzhou Jinton Software
- o Thales
- Travis Perkins Plc
- o VisualDNA

Technical Consultancy, Technical Analysis, Architects

- Technical Analyst, Technology Analyst, Business Analyst, Systems Analyst, Data Analyst
 - o American Express
 - o Analogue Devices
 - o ARM
 - o Bank of America Merrill Lynch
 - o Barclays Capital, Barclays Plc
 - o Benefex
 - o China Telecom
 - o City Bank
 - o Credit Suisse
 - o EE
 - o ExxonMobil
 - o Goldman Sachs
 - o IBM
 - o Imagination Technologies
 - JP Morgan Chase & Co
 - o Morgan Stanley
 - o Nomura International
 - o Telcocell Ltd
 - o Towers Watson
 - Zurich Insurance

Other Roles:

- Trainee Clinical Engineer, NHS <u>www.nhscareers.nhs.uk</u> and NHS Scientist Training Programme <u>http://www.nshcs.hee.nhs.uk/join-programme/nhs-scientist-training-programme</u>
- Patent Attorney
 - D Young & Co
 - o HGF Ltd
 - O Page, White and Farrer

Robotics:

• BARA British Automation and Robot Association <u>www.bara.org.uk</u>

Games industry:

- Datascope jobsboard <u>www.datascope.co.uk</u>
- International Games Developers Association <u>www.igda.org</u>
- Games industry international <u>www.gamesindustry.biz</u>

Digital Media

• Wired Sussed for digital media events, jobs and news http://www.wiredsussex.com/

Recruitment agencies focusing on Technology and Engineering sectors

- Networkers <u>https://www.networkerstechnology.com/job/browse-jobs</u>
- Matchtech <u>https://www.matchtech.com/</u>
- Strgroup <u>http://www.strgroup.co.uk/</u>
- ARM Advanced Resource Managers http://www.arm.co.uk/

Other Jobs boards and information sites:

- CW Jobs <u>www.cwjobs.co.uk/Graduate_IT_Jobs</u>
- Computer Weekly <u>www.computerweekly.com/jobs</u>
- IT Jobs Watch <u>www.itjobswatch.co.uk</u>
- WirelessMobile-jobsboard.com <u>www.wirelessmobile-jobsboard.com</u>
- Total Telecom <u>www.totaltele.com</u>
- Technojobs <u>www.technojobs.co.uk/jobs/graduate</u>
- EE Times Europe <u>www.eetimes.eu/uk</u>
- Electronics Weekly <u>www.electronicsweekly.com</u>
- The Engineer online https://jobs.theengineer.co.uk/
- Engineerjobs <u>https://www.engineerjobs.co.uk/</u>

Key Occupational Information:

Professional bodies offer student membership, careers information, news, jobs boards, professional accreditation and Chartership. Some have lists of member organisations. Student societies in ECS have many employer events.

- **British Computer Society** <u>http://www.bcs.org/</u> Current issues, careers information, jobs and profiles.
- Institution of Engineering and Technology <u>www.theiet.org</u> Combines the Institutions of Electrical and Incorporated Engineers
- IEEE http://www.ieee-ukandireland.org/ Global professional association for technology professionals, current issues, jobs, advice
 - UoS student branch <u>http://www.ieee.ecs.soton.ac.uk/</u>
- Society for the Study of Artificial Intelligence and Simulation Behaviour <u>http://www.aisb.org.uk/</u>

- Institute of Physics and Engineering in Medicine <u>www.ipem.ac.uk</u> Promotes the advancement of physics and engineering applied to medicine and biology.
- Women in technology <u>www.womenintechnology.co.uk</u>
- WISE, women in science and engineering classroom to boardroom http://www.wisecampaign.org.uk/
- WWW https://www.wherewomenwork.com/

Newspapers and Journals:

- For up-to-date news and emerging career opportunities:
 - o The Guardian Technology supplement,
 - The <u>BBC Technology pages</u>
- <u>The New Scientist</u> for special reports (e.g. nanotechnology, robots, graduate opportunities), careers information and jobs.

Further Study:

Over the period 2012 to 2015, an average of 13% of undergraduate students go on to further study, either a PhD, MPhil or specialist Masters programme in a related field. A few graduates choose study in a new area, or the PGCE teaching qualification. Check out our <u>Further Study pages</u> for more information on choosing a further study programme.

These are some examples where and what graduates have studies (data collected from 2011 onwards).

PhD/MPhil:

• University of Southampton (lots), University of Cambridge, UCL, Royal Holloway, Massachusetts Institute of Technology, University of Pennsylvania

MSc:

- Bioengineering, Imperial College, London
- Risk Management and Financial Engineering, Imperial College, London
- Computational Biology, University of Cambridge
- Computational Statistics and Machine Learning, UCL
- Artificial Intelligence, University of Edinburgh
- Computer Games Technology, City University, London
- Computer Animation & Visual Effects, Bournemouth University
- Energy and Sustainability, University of Southampton
- Nano Electronics, University of Southampton
- Web Technology, University of Southampton

Research Councils:

Research councils provide funding for some PhDs (and very occasionally masters degrees) through training grants. This is organised with the university, but you can see what projects are being funded and the criteria on the relevant council websites, two of which are shown here. You can use the <u>HEFCE site</u> to find out about other English higher education institutions, with links to partner organisations for Northern Ireland, Scotland and Wales.

- Engineering and Physical Sciences Research Council <u>www.epsrc.ac.uk</u>
- Biotechnology and Biological Sciences Research Council <u>www.bbsrc.ac.uk</u>
- Higher Education Funding Council for England <u>http://www.hefce.ac.uk/workprovide/unicoll/</u>

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