TECHNOLOGY AND ENGINEERING

THE WORLD NEEDS YOU. BE THE ENGINEER OF YOUR OWN FUTURE.

Studying technology or engineering opens up a world of possibilities. Essex graduates have gone on to work in areas such as software, web or game development, information systems, data analysis, networking or electronic engineering and consultancy. Your skills are in demand but don’t be complacent; you need to keep learning and innovating to keep up with this fast-moving sector.

WHERE CAN YOU WORK?

You may have ambitions to work for a technology giant such as Amazon, Google, IBM, Microsoft or Apple, but don’t overlook other options. There is a huge demand for technical skills in other industries such as the public sector, finance and banking, retail, manufacturing, not-for-profit and consultancy or you could work for an SME (Small or Medium Enterprises). SMEs accounted for 60% of all private sector jobs in the UK (FSB, 2018) and many are looking for technical graduates.

Research graduate employers from different sectors using websites such as:

targetjobs.co.uk/employers
www.gradcracker.com/directory/sectors

ONLINE VACANCY SOURCES

careerhub.essex.ac.uk/students/jobs
CareerHub job vacancies
www.gradcracker.com
science, engineering and technology vacancies
www.stemgraduates.co.uk
STEM recruitment specialists
targetjobs.co.uk
Graduate job vacancies
debut.careers
Use this app to build a profile where employers can find you
www.cwjobs.co.uk
Range of tech roles
www.technojobs.co.uk
Collates IT & Technical vacancies from various job portals
www.gamesindustry.biz
news and vacancy information about the games industry

AGENCIES

www.matchtech.com
Engineering and Technology recruitment specialists
www.ecmselection.co.uk
High tech recruitment
www.aswift.com
Video games recruitment
www.o.pmjobs.com
Video games recruitment

RESOURCES

www.theiet.org
The Institution of Engineering and Technology

Guides to the sector for graduates:
targetjobs.co.uk/career-sectors/it-and-technology
www.brightnetwork.co.uk/career-path-guides/technology-it-software-development/
www.prospects.ac.uk/jobs-and-work-experience/job-sectors/information-technology
CAREERS IN TECHNOLOGY AND ENGINEERING

There are many different roles within the sector so we’ve pulled together some of the most common job types as an overview. Note that job titles may vary depending on the employer; therefore when job searching it’s useful to be flexible with terms such as systems, software, database, programmer, analyst, engineer, developer etc.

SOFTWARE ENGINEERING (DESIGNING, BUILDING, DEVELOPING AND TESTING)
You would implement software solutions by building programs, applications and websites. The work can involve talking to clients and colleagues to assess and define what solution or system is needed.

WEB DESIGN / DEVELOPMENT
This involves building and maintaining websites and web applications. Although work usually focuses on the underlying software and databases (back-end), some work is solely on the interface and visual design (front-end), while others combine both (‘full-stack development’).

GAME DEVELOPMENT
You’ll be involved in the creation and production of games for various devices. Depending on the company you work for you may be involved in the design as well as the development of the game.

This is a competitive industry therefore passion, perseverance and work experience as well as the relevant technical skills are essential.

IT CONSULTANCY
Typically technical consultants provide technical expertise to, and develop and implement IT systems for, external clients. You may also be called upon to provide guidance and technical expertise during other processes as well. You would need excellent communication and organisational skills to perform well in this role.

HARDWARE ENGINEER
You would be involved in research, design, development, and testing computer equipment such as chips, circuit boards, or routers. You could participate in any stage of a project including the initial brief for a concept, design and development, testing of prototypes and the final manufacture and implementation of a new product or system.

SYSTEMS / BUSINESS ANALYST
You would design and analyse technical systems or processes to ensure that they are running efficiently and productively within the organisation. You would need good project management skills as well as excellent communication and organisational skills.

DATA ANALYST / SCIENTIST
The ability to draw insights from data is in huge demand from multiple sectors. Working in this field you would be required to look into, organise and analyse data. You would need to be highly analytical, have strong mathematical skills, as well as being curious and inquisitive.

CYBER SECURITY
Cyber security is fast becoming one of the most important roles in the tech sector as cyber criminals and hackers become ever more sophisticated. In this role you’ll protect an organisation by preventing, detecting and managing cyber threats. You could be offering advisory services to clients or working to protect the security of the organisation you work for.

Find out more about what career paths are available to you:

Electronic Engineering:

Computer Science:
www.prospects.ac.uk/careers-advice/what-can-i-do-with-my-degree/computer-science