ROUTING for JOHN

Mapping pathways to help YOU choose the right route to your future career.



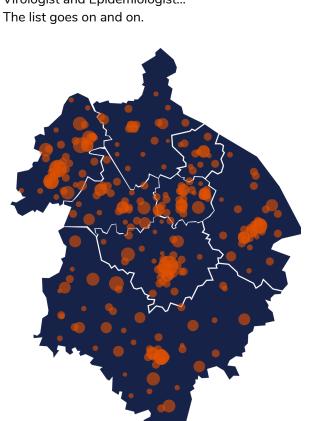


What is Life Sciences?

What is Life Sciences?

Life Sciences refers to the application of biology and technology to health improvement, including biopharmaceuticals, medical technology, genomics, diagnostics and digital health. Life sciences cover some of the most challenging yet rewarding subjects out there. They are also some of the most exciting with medical breakthroughs occurring every day.

Example job roles in the Life Sciences include Paramedic, Computational Biologist, Research Associate, Bioinformatician, Dental Nurse, Veterinarian, Physiotherapist, Psychologist, Virologist and Epidemiologist... The list goes on and on.

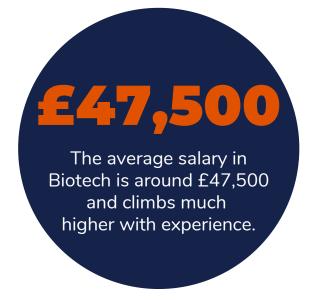


The heat map to the left indicates the number of jobs posted by employers during 2019, helping you to quickly recognise areas of high and low job density around you.





Not for the faint-hearted. The job of a Snake Milker is to collect the venom of poisonous snakes in jars for use in anti-venoms and other medication.



Why Life Sciences?

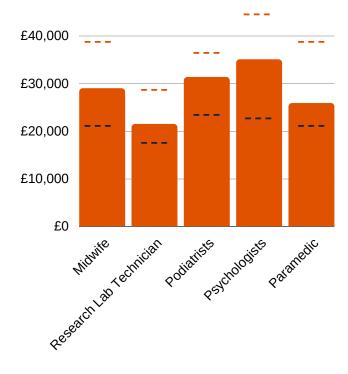
Entering a world of science gives you countless opportunities. It is more than you may think; it's a world of exploration, analysis, challenges, excitement and rewards. Suppose you are passionate about sciences and want to be a pioneer, inventor or improve the lives of animals or people, then this is the sector for you.

There are endless career options – you do not need to know now what you want to be, just where you want to be. For example, if you love biology, then why not work towards a biology degree? This degree can lead you into roles such as Biochemist, Biotechnologist, Microbiologist or maybe Biomedical Scientist, any many more.

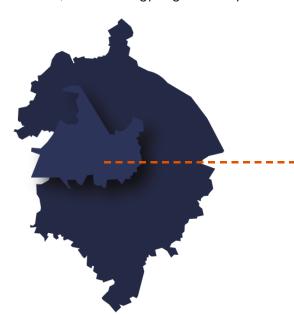
Pathways can also be more specific. If you know you want to work with animals and study their behaviours, then a zoology degree is for you.

Average Salary in UK

- --- Can earn up to
- --- Average starting salary



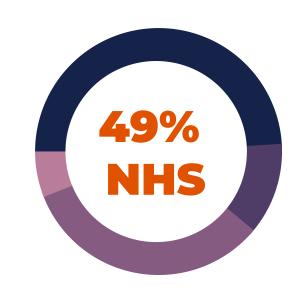
Solihull has had an 18% increase in Life Science job postings since 2016.



Who's hiring?

In 2019 the NHS made up 49% of all job postings within the Life Science Sector in Solihull and the wider region.

Other businesses, for example, private health care, gyms and universities (to name just a few) made up the additional 51%. 12% of postings came from businesses hiring between 101 and 200 candidates, 33% came from businesses employing between 11 and 100 candidates, and 6% came from businesses hiring up to 10 candidates in the year.





Did you know?

Some universities offer courses with a foundation year for those without the necessary entry qualifications.

Did you know?

Students are entitled to at least £5.000 a year towards their studies while at university and will never have to pay it back.

Qualified Nurse

A newly qualified Band 5 NHS Nurse in 2020 will earn £24,907.

Apprenticeships ---- University

A nursing degree apprenticeship consists of four years working within the NHS while gaining a qualification.

Nursing is the UK's most employable type of degree, with 94% of students getting a job within six months of finishing thier course.

There are some degree courses that allow you to study in two fields. These are known as 'dual field' degrees. The fields are adult nursing, children's nursing, learning disability nursing and mental health nursing.



Nursing degrees aren't all about having your nose in a book. There is lots of practical hands-on experience with patients.

Other Courses

To go to university or become a nursing degree apprentice you can do a health and social care Level 3 course at Solihull College. Other courses to consider are: Access courses e.g. access to nursing **Pearson BTEC Level 3 Diplomas OCR Cambridge Technicals** International Baccalaureate (IB).

---- A Levels

You will need a minimum of two (usually three) A Levels to progress onto a Level 4 qualification. At least one in the following subject: biology, chemistry, physics, applied science, health and social care, psychology, sociology or physical education.

School

To progress to the next stage you usually need a minimum of 5 GCSE's grade 4 or above which should include maths, at least one science and English language or literature.

Did you know?

2022

Birmingham's Life Sciences Park is due to open in 2022 accelerating life sciences research in your area.



Sir David Attenborough

studied natural sciences before joining the BBC in 1952.



There is a drive for higher levels of employment and better health outcomes for citizens within the West Midlands.



Despite a 33% decrease in the wider region job postings in 2019 compared to 2016, Solihull has had an 18% increase!



Significant investments

in skills and development within the Life Science sector.



Tomorrow's Working World

Worldwide changes

What's happening and how does this impact you and your career?

Which jobs will be a priority?

Environmental concerns and changes to the global climate.



People are looking for greener energies and developing technologies which are more efficient and sustainable. The importance of looking after the planet has never been more recognised.

Moving towards a greener world will affect all sectors. Industries are switching over to ecological technologies and changing how we work with an increase in remote working and digital technology.

Engineering Automotive Design, Chemical Processing, Recycling and Waste Solutions, Agriculture Energy and Utilities Innovation

Ever-increasing need for speed, turnarounds and direct routes to a result.



Convenience and fast delivery of projects is a priority. With an economy vastly effected by global changes and the pandemic, businesses are finding ways to save money and speed up processes to help them survive.

Businesses are becoming more accessible via digital platforms and using technology to reduce overheads, providing opportunities in roles within the technology, manufacturing and digital sectors.

Advanced
Manufacturing, Business
Developers, Creative
App Development,
Coding, Digital
Marketing, Professional
Services, Lawyer, Sales
Representative,
Underwriter, Auctioneer,
Judge, Coroner, Valuer

Technology is advancing every day with new technologies emerging at an ever-growing rate.



The world is changing as a result of emerging technology. Some jobs and market requirements have become redundant because of new ways of working.

Technologies will keep changing, and therefore different skills will be desired in areas such as IT, design, mechanics and STEM subjects. Engineering, Advanced Manufacturing, Creative Media roles, ICT Data Analysts, Aerospace, Aeronautical, Electronics, Energy Technology

Life expectancy is longer than ever before with the average person living to 81 years old.



Due to medical advances and the development of life sciences, people are living for longer than ever before.

You will be working longer due to the everincreasing retirement age. Although this may not be something you are thinking about now, it will be important to you when you get older. You want to find a career that makes you happy and fulfils you. All sectors



What next?

The information in this brochure only scratches the surface when it comes to choosing your career pathway. Now it is time to start looking at your options and choices, carry out research and discover what is out there for you. Follow your passions and make a career out of what you love. Opportunities are endless. You just need to start looking for them.



Sources & Useful Links

Useful links:

- https://nationalcareers.service.gov.uk/explore-careers
- www.statista.com
- http://www.lmiforall.org.uk/explore_lmi/
- https://www.ucas.com/

Advanced Manufacturing:

 https://nationalcareers.service.gov.uk/jobprofiles/mechanical-engineer

Business, Professional and Financial:

 https://gbslep.co.uk/what-we-do/business/businessprofessional-financial-services

Creative:

- https://www.gov.uk/government/news/uks-creativeindustries-contributes-almost-13-million-to-the-ukeconomy-every-hour
- https://www.wmca.org.uk/news/creative-industries-in-west-midlands-to-get-12m-boost-from-government/
- https://www.thecreativeindustries.co.uk/media/529975/cic_3yr_export_strategy_v3_singles.pdf
- https://www.creativeindustriesfederation.com/statistics

Energy Technology:

- http://www.nef.org.uk/knowledge-hub/otherrenewable-energy/renewable-energy-technologies
- https://www.prospects.ac.uk/jobs-and-workexperience/job-sectors/energy-and-utilities/renewableenergy-careers
- https://www.bmrsolutions.co.uk/a-beginners-guide-tocareers-in-renewable-energy/
- https://www.careeronestop.org/GreenCareers/ExploreG reenCareers/renewable-energy.aspx
- https://www.statista.com/statistics/1094309/renewable -energy-market-size-global/
- https://www.quanta-cs.com/blogs/2017-10/why-workin-renewable-energies

Life Science:

- https://www.healthcareers.nhs.uk/explore-roles
- https://career-advice.jobs.ac.uk/resources/what-jobs-could-i-do-in-life-sciences/
- https://gbslep.co.uk/what-we-do/business/life-scienceshealthcare
- https://www.lateet.com/8-cool-facts-to-know-about-acareer-in-life-sciences/







