

Promoting Growth

Future Paths Initiative

"Turning Potential into Results, One Student at a Time"

NEWSLETTER

ISSUE 7



THIS ISSUE'S OVERVIEW

Science can open up many sectors. So our first section describes interesting pathways you can journey through with a science degree!



HAS FPI HELPED YOU?

Hold that thought! Head to our **FPI Review Form** to let us know. **We love you all and will be there every step of the way to your success** ❤️ **We hope you enjoy reading! :)**



CONTENTS

INTRO

PART 1

ALTERNATIVE
CAREER
PATHWAYS IN
SCIENCE

PART 2

DUKE OF
EDINBURGH

PART 3

CAREER OF THE WEEK

PART 4

BUSINESS AND
FINANCE

PART 5

CYBERSECURITY

PART 6

REVISION TIPS

PART 7

POLITICS

PART 8

CREATIVE
OPPORTUNITIES

ALTERNATE CAREER PATHWAYS IN SCIENCE

A degree in Natural Sciences (Physics, Chemistry, Biology, Astronomy and Earth Sciences) **may be more valued than you think!**

A degree in any of the Natural Sciences (think Physics, Chemistry, Biology, Astronomy, and Earth Sciences) is one of the best degree options if you're a) **good with numbers**, and b) **unsure on your career destination**.

These degrees offer you a plethora of career options due to the analytical and numerical skills they provide and can often be preferred for certain jobs than the industry standard degree (e.g. Physics might be preferred over Economics for a job in finance).

So I'm going to introduce you to a few sectors that value these degrees the most, why they do, and how you can use your degree to break into these sectors.

PART ONE SCIENCES

ALTERNATE CAREER PATHWAYS

IN SCIENCE



FINANCE

The world of Finance is ever-changing, with the focus of the industry moving away from human analytics and towards AI and computer algorithms delivering analytics and investment strategies. This means that the higher-paying jobs are often targeting university graduates that have more skill in Mathematics, Analytics and Coding, as know-how in financial markets is less needed when computers are making the decisions.

The most sought after degrees for these more quantitative roles would be **Physics, Maths, Applied Maths, Computer Science** and **Engineering** due to the great focus on mathematics within the course content. The most competitive and highest-paying jobs will often look for PhD and Master's students, so weigh up the **return on investment** of postgraduate study to see how much it can increase your future earnings by.

Therefore, if you're unsure if a job in finance is for you, doing a degree in one of the sciences can open up your career options. And if you decide that it isn't, you still have the ability to change your career path towards a Research or Engineering role, providing you flexibility that a degree in, for example, Economics might not.

PART ONE SCIENCES

ALTERNATE CAREER PATHWAYS

IN SCIENCE



SCIENCE POLICY

One of the many roles of the government is to make informed policy decisions, and in many cases, **these policies will have strong overlaps with science.** Think pollution regulations or climate change policies. Your main role in Science Policy is to commission, and sometimes conduct, research that can help change policy, and you'll be verifying and analysing the data to advise politicians and stakeholders as to how to adapt policy based on the research.

The work can be very exciting as it is on the cutting edge and forefront of policy and you can be dealing with topics such as nuclear waste or space exploration. You'll need **excellent verbal communication skills** to articulate yourself to make it understandable for politicians who may not understand the intricacies of science. A degree in any science respective to the policy you'll be working on, such as **Biology** to advise the legalisation of a medicine, can help you break into the sector. You should try couple this with some **internship** or **volunteering work** at a political or government institution such as a *think tank* or a local political party. So if you've got an interest for politics, but your skillset is more tailored towards a job in science, then a job in Science Policy could be the one for you.

PART ONE SCIENCES

ALTERNATE CAREER PATHWAYS

IN SCIENCE



SCIENCE COMMUNICATION/SALES/MARKETING

Since customer service for a business that sells complex scientific products usually cannot explain in detail how the product works, this business needs a team who can **effectively communicate what the product does** to deliver more 'expert' customer service.

If you're a 'people-person' or have a great ability to explain your point, then a role in science communications could be the one for you. On top of being able to understand the science, you'll also need to be able to **simplify the knowledge** so that non-experts can understand it. A great example of this would be in electric car sales, where the science is very complex but can be simplified into a few key points which summarise the benefits of the cars which have grown sales. Once again, a degree in the respective science to what your selling would be most optimal, such as a degree in automotive engineering or environmental sciences for the electric car role.

I hope this has helped you identify a few options you can pursue with a degree in Science, and help you realise that you're not limited to just lab work with your degree. **If you need any support with working out the career path that could be best suited for you, make sure to contact us at team@fpi.org.uk.**

PART TWO DUKE OF EDINBURGH

WHY DOFE IS IMPORTANT

WHAT IS DUKE OF EDINBURGH?

Duke of Edinburgh has three stages to it:

Bronze, where you do a Physical, Volunteering, and Skill section for 3 months, with an extra 3 months for one of the sections, then do a two day, one night expedition;

Silver, where you are required to complete 6 months in Volunteering, and 3 or 6 months in the other two, and a three day, two night expedition; and

Gold, where you need to do 12 months in Volunteering and 12 or 6 in the other two, and a five day, four night expedition. For Gold, you also have to do a "Residential" trip, where you have to be away from home for 5 days with people you don't know and participate in some sort of activity with a registered organisation.

(‘months’ refers to the duration of the course itself: you will not be expected to spend months doing only work!)

MORE ON **DOFE** OF EDINBURGH NEXT PAGE

WHY?



Having done any of the three Awards instantly **boosts your Personal Statement or CV** as it shows that you have soft skills of perseverance and determination, however - in my opinion - not doing DofE Gold limits you to gaining only a fraction of the benefits.

Having all of the DofEs on your record paints you out to be an **incredibly committed individual**, which all organisations value tremendously.

Another huge advantage of completing your Gold Award is that you will be invited to a **special celebration at Buckingham Palace**, where you can meet all of your peers and gain connections from all over the UK, which will be very rewarding!



Many students are very intrigued by this extracurricular but shy away from the expedition itself, as they hear petrifying stories about groups being chased by cows, or waking up to see their tent has transformed into a pool (both of these have happened to me) and let me assure you, they make the funniest stories once it is over! Some of the expeditions can be very physically exhausting but if so many students have done it why couldn't you?



PART THREE CAREER OF THE WEEK

GRAPHIC DESIGNER ✨

GRAPHIC DESIGNERS create visual concepts to communicate information. They create everything from posters and billboards to packaging, logos and marketing materials. Graphic Designers use elements such as shapes, colors, typography, images and more to convey ideas to an audience.

Graphic designers should demonstrate their creativity and originality through a **professional portfolio**. Graphic designers usually need a **bachelor's degree in graphic design** or a related field.

You can specialise in:

- **packaging design**
- **web design**
- **animation**
- **publication design**
- **illustration**

PART THREE CAREER OF THE WEEK

GRAPHIC DESIGNER

What skills do I require?

- Design principles
- Branding
- Typography
- UX and UI design
- Acquire a tasteful palette for colours
- Ideation (a.k.a idea generation)
- Brand management
- Be proficient with Adobe Illustrator and Photoshop

It's **essential** to gain work experience as a graphic designer!

Employers seek graphic design candidates with relevant experience. For entry- or mid-level roles, they may prefer individuals with **at least three years of experience**. More advanced or managerial or directorial jobs may require **at least six years of experience**. Candidates can begin building experience as students, often by participating in internships or working at part-time jobs. They can also volunteer to perform graphic design duties for local businesses, organizations or personal connections



This part is crucial to building a substantial portfolio. A portfolio represents a visual collection of their most significant work. Candidates often host their portfolio on a website and share the link on their resume and social media profiles, making it easily accessible to potential employers, clients or recruiters.

PART THREE CAREER OF THE WEEK

GRAPHIC DESIGNER

The Average Graphic Designer salary in the UK is

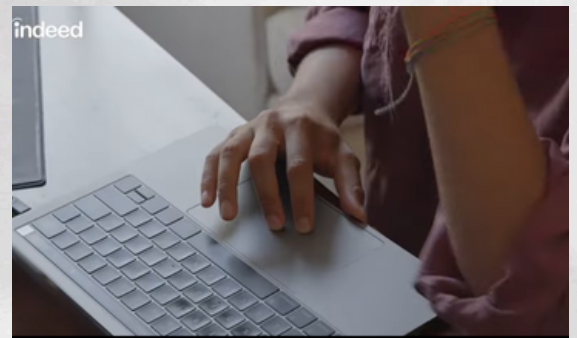
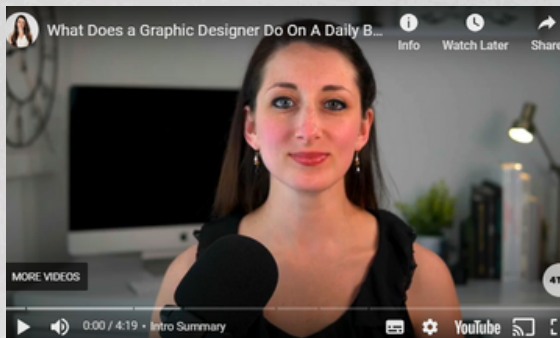
£31,038

Low
£29,807

High
£32,395

High end paying jobs are most commonly concentrated in **London**, ranging **up to £90,000**

RECOMMENDED LINKS TO CHECK OUT:



EMERGING INDUSTRIES

For many young people, deciding on a direction for your future career is already a difficult step- however, choosing to enter “the finance industry” doesn’t help in the slightest when trying to make your mind up on pursuing a certain career.

This is why we’re providing you with some inspiration on particular branches and niches of finance, which are projected to grow significantly certainly in upcoming years and decades, as well as useful skills and degree courses to have a look at. However, bear in mind that every career trajectory is unique, unpredictable and that these are only suggestions, to perhaps be keeping in mind when searching for supplementary experiences to enrich your CV and personal statements.



FINTECH

MEDIAN US SALARY **\$170,850**

It's in the name- fintech, is the interdisciplinary intersection of finance and tech. This field generally is focused on developing financial products, services, and solutions.

Some of the key skills required for this field would be some background knowledge in computer science, i.e. blockchain and programming- experience in cybersecurity and financial analysis could also be particularly useful.

Potential degrees include: Financial Technology MSc, Financial Management MSc, Computational Finance MSc

[READ MORE](#)



CRYPTOCURRENCY ANALYST

MEDIAN US SALARY **\$76,273**

This career path crosses the traditional role of a stock analyst with the nuances of predicting prices of cryptocurrencies. Cryptocurrency analyst work with a large cross-section of tools including both historical data but equally various technical tools and modelling.

Requirements for this often include understanding blockchain and a relevant degree in finance/economics or a related field.

Recommended degrees include: Finance MSc, Economics Msc, Computer Science MSc- however there is a variety of interesting double honours etc degrees, such as Finance and Data Analytics Msc.



QUANTITATIVE ANALYST

MEDIAN US SALARY **\$145,970**

Quantitative analysts apply statistical methods to find solutions to both financial and risk management issues. They focus on developing and utilising complex models to aid in understanding markets, and basing important financial decisions on this.

As it is a very technical field, a strong background in maths, computing and financial theory is advised. Statistical analysis and experience in coding such as C++ or Python are recommended too.

Recommended degrees include: Statistics BSc, Financial Mathematics MSc, Economics and Maths Msc, but with the right training and postgraduate courses, this career trajectory is still feasible.

PART FIVE CYBERSECURITY

PATHWAYS INTO

cybersecurity



Cybersecurity is how an individual or organisation reduces the risk of a cyber attack. This is by protecting their systems, devices, networks, data, and programs from cyber attacks. When you work in Cyber Security, you are equipped with knowledge and skills to help prevent these cyber attacks from occurring.

Many would agree that the first step into Cyber Security is to **get a degree**. Whether that is a degree in Computer Science, Data Science, IT, or Cyber Security. If you're aiming for a higher position such as Senior Cyber Security Analyst or Team Manager, some employers may require a **master's degree** for such roles. By getting a degree, you are supplied with technical knowledge that will aid you as you fulfil your role.

1

Another pathway would be to **gain Cyber Security skills**. This is a great addition to your degree, course, or certification. Skills such as analytics, programming, teamwork, and problem-solving are essential for most Cyber Security roles. Being able to apply technical and soft skills to your role is extremely important and will set you apart from your peers.

2

The third step would be to **enrol into online Cyber Security courses**. This is an option for people who would not like to pursue higher education. Online courses are an affordable way to gain knowledge and experience from home. Another option is a Cyber Security certification. This shows employers how dedicated and passionate you are about entering the industry.

Courses and Certification can include CYSA: CompTIA Cybersecurity Analyst, or ISC2. These can be found on Coursera or a specific certification provider.

3



PART FIVE CYBERSECURITY

PATHWAYS INTO **cybersecurity**

A final step which is required in most industries is **practical experience**. This could be working on a basic tech project with your peers, or shadowing a Cyber Security analyst, a hackathon, practising ethical hacking, or attending a cyber security conference/competition. Getting practical experience will allow you to put all the knowledge and skills you have obtained to practice.

4

What are some skills needed to succeed in **Cyber Security**?



Knowledge of all types of security

- Cyber security is not limited to computer forensics and hacking. It also includes working on various operating and computer systems, cloud and wireless networks, and mobile devices. It is important to keep up-to-date on these systems to be able to adapt to all types of cyber attacks.



Attention to detail

- Having to guard an entire organisation against cyber attacks requires you to be alert and vigilant. This ensures you effectively detect vulnerabilities and threats. You will need to quickly identify any concerns and find solutions accordingly. This might also mean you are able to work well under pressure.



A desire to learn

- Cyber security is a fast-changing field. If you desire to work in this field you will need to keep up-to-date with best practices and emerging industry trends. You will always need to be learning.



PART SIX REVISION TIPS

Revising effectively is key for achieving top grades.

Passive revision methods, like **reading through notes** or **highlighting**, often lead to **poor retention** and understanding. These practices can often create a false sense of accomplishment because the information is right in front of you. However, **active revision** forces your brain to retrieve information from memory, leading to better results.



Active Recall

Test yourself- Use flashcards, this could be digital like [Anki](#), [Quizlet](#) or physical. So, you can accurately see what you actually know. If you don't remember the answers, don't worry- making mistakes actually improves your learning in the long run. When you get something wrong, your brain works harder to understand and correct the mistake, which leads to better retention.

Practice tests

Regularly testing yourself with past exam papers or doing topic questions can significantly improve your recall abilities. This simulates exam conditions and highlights areas where you need more practice.

Teach someone else

Whether it be a friend, teddy, family member or even the wall. It is an underrated way of learning as you are explaining concepts which forces you to simplify ideas and ensures you truly grasp the content. And allows you to see where your weak areas are.

more tips below!! ↘



PART SIX REVISION TIPS

Spaced Repetition

This is a technique where you **review information at increasing intervals**. This method, often done with flashcards, as we learn more effectively when we spread out our study sessions. By coming back to a question a few days or weeks later, you boost your retention. The same goes for topics: review a topic a few days after learning it. Anything you can't remember can be revisited, leading to a better understanding and potentially uncovering connections between different topics, which further strengthens your memory.

Plan ahead

Spacing revision out over days and weeks. This also helps to prevent cramming and procrastination.

Mind mapping

This helps organize information, making it easier to remember and retrieve. Creating mind maps allows you to connect concepts visually. Helping you in understanding the relationships between different pieces of information.

Summarise notes

Condense your notes into mind maps/A4 paper to see the bigger picture and try to do this by memory and go over what you forgot with a different color and retry a couple days later.



more tips below!! ↘

PART SIX REVISION TIPS



Active Engagement

Actually engage with the content in different ways to make your revision more dynamic and effective.

Group study

Discussing topics with peers/friends can expose you to different perspectives and explanations or even hacks and tips for how they understand difficult concepts, which further deepens your understanding.

Question yourself

Continuously ask yourself questions about what you are studying. This keeps your brain actively engaged and ensures you are processing the information.

Exam Practice

This should be prioritized over everything else. As soon as you have a brief understanding of a topic, move on to practicing exam questions. This allows you to see what the exam requires you to know and helps you actively revise at the same time.

Embrace Mistakes

Don't be afraid of making mistakes during revision. Mistakes can be incredibly beneficial for learning. When you make a mistake, your brain works harder to correct it, which strengthens your memory and understanding. See mistakes as opportunities to improve.

Active revision requires effort and consistency, but the results are worth it! By implementing these tips into your study routine, you will enhance your memory, understand better, and be well-prepared for your exams. Remember, making mistakes is part of the learning process, so embrace them and use them as a chance to improve. Best of luck!

written by Lulu Mohamud



PART SEVEN POLITICS

HOW CAN I ENHANCE MY UNIVERSITY APPLICATIONS AS A **POLITICS** STUDENT?

The 2024 UK general election presents a unique opportunity for aspiring politics students to enhance their university applications. By integrating experiences and reflections related to this pivotal event, you can demonstrate your passion for politics.

Here are a few ways to incorporate the 2024 general election into your personal statement.

Analysis of Key Issues

The 2024 election highlighted several significant political issues, including healthcare, education and climate change. Not only are these topics central to the election, they are also pivotal in shaping the future of the country. You can discuss how these issues have influenced your interest in politics in your personal statement, for instance you may write about how the ongoing debate over NHS funding sparked your curiosity about public health policy or how climate change discussions have driven your passion for environmental legislation. By showcasing your engagement with these key issues, you demonstrate a deep understanding of current political dynamics and a commitment to addressing them through your studies.



PART SEVEN POLITICS

HOW CAN I ENHANCE MY UNIVERSITY APPLICATIONS

AS A **POLITICS** STUDENT?

Debate participation

Participation in debates, whether that be in a school or community setting, is an easy and effective way to demonstrate your analytical skills. Organising a debate in a group setting between people with different political views in light of the new government can help you hone your ability to construct arguments and analyse different viewpoints; crucial skills for studying politics at university

Media and communication

The role of the media in shaping public opinion is an interesting aspect of modern elections. You could conduct surveys or interviews with people who voted in the election, or who have a decided opinion on who they would have voted for if they were unable to do so, and analyse whether they were influenced by media outlets who covered the 2024 election. In your personal statement you could reflect on this, and showcase your media literacy skills by exemplifying your understanding of media dynamics.

Policy impact

You may consider analysing the political impact of the 2024 election results on the new Labour government's policies. For example, you could discuss how changes they plan to / have made align with your academic interests and career aspirations. For instance, if you are passionate about education reform, you could explain how the election outcome has influenced educational policies and what impact this may have for your future studies. This approach would showcase your forward-thinking and how you are already considering the impact that a new government can have on your own and other people's lives in various policy areas.

written by maha m

PART EIGHT CREATIVE OPPORTUNITIES

The key to finding opportunities in creative subjects, including journalism, is a combination of finding opportunities and developing on these to go further.

Many schools/colleges have existing publications running – some more developed than others. These publications can range from purely informational (featuring local, national, international news or school based information/events) or some become more cultural, discussing a diverse range of information, pop culture, sports, etc.

The biggest advice I can give, is to find **what is currently going on at your school**, and **find your place and where you'd fit within it**. For example, if your college provides a cultural magazine, show interest by joining but then seek to develop the publication.

How to do this? **You ask yourself questions:** *How frequent/consistent are the releases? Should a schedule be made? Is the release physical, digital or both? How do you want to enhance this? What is the readership like for the magazine? How do you think you could help expand this?*

This list is extensive but not exhaustive, your contributions to expand the existing publications at your college will vary based on your personal interests and areas of expertise. Personally, I looked to develop the promotion of our magazine using social media to widen our readership—this allowed me to use my graphic design and marketing passions in alliance with my interest in literature and writing. Others in my team have focused on expanding our writing into audio form and creating a podcast, there really are options to suit everyone.

By going above and beyond within these publications and actively showing interest in development, you fit yourself perfectly within the strategic “first, best, only” framework. By not only participating in an extracurricular, but being the **FIRST** person to expand upon this, maybe the **ONLY** person who does a certain part of the publication? The opportunities to expand your extracurricular strategy are endless!

written by jenna laband



**Has FPI helped you? Are you likely to recommend it to a friend?
Let us know!**

 [FPI Review](#)

Thank you for reading our newsletter. We appreciate your time and support and we will always strive to support your goals. 🙏