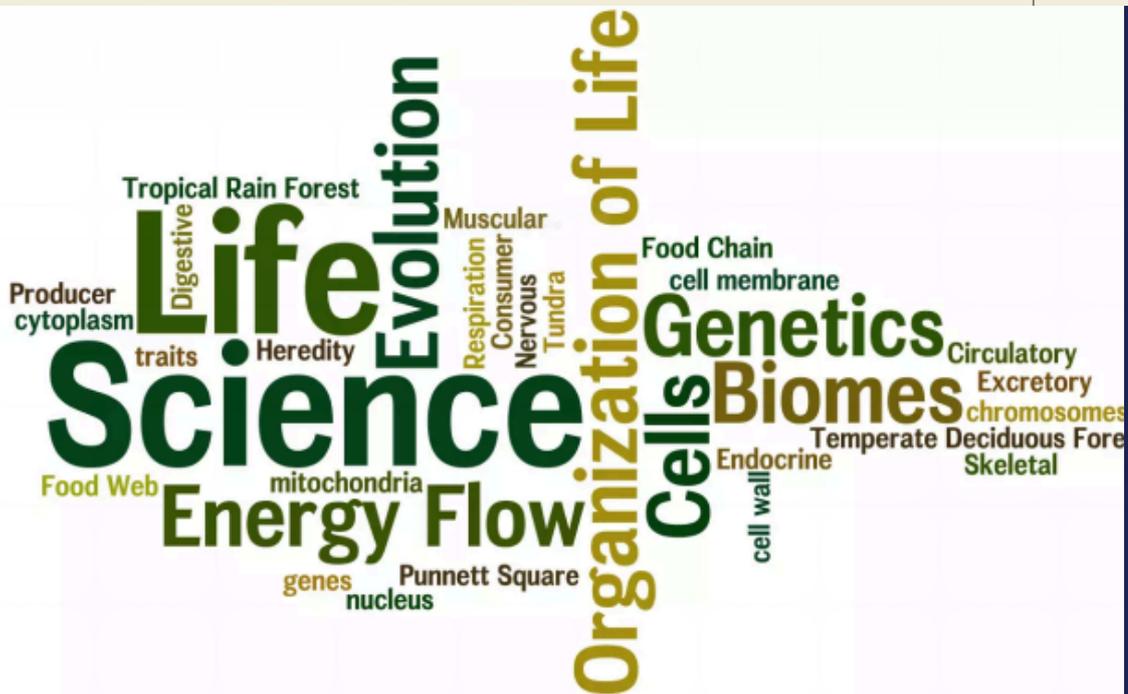


Top In-Demand Career Options for Science Students in 2025



Counsellor's Newsletter



<https://shorturl.at/QM8Jw>

The world of science presents a wide array of exciting career opportunities driven by rapid technological advancements. The rapid growth of technology and healthcare management, in particular, has significantly expanded career opportunities for science graduates.

For instance, employment in computer and information technology occupations will grow by 11% between 2019 and 2029, which is an indication of growing demand for skilled professionals. In this blog, you'll explore different career options for science students and tips needed for a successful career in this field. Let's dive in!

1. PHYSICIAN (DOCTOR)

A physician is a healthcare professional who practices medicine, and is concerned with promoting, maintaining, or restoring the health of individuals.

You need the following qualifications to become a physician.

- Complete high school with subjects like biology, chemistry, and physics
- Complete MBBS degree
- Complete masters in specialized medical fields like cardiology, neurology, pediatrics, surgery, etc.
- Clear the licensing exam to practice medicine.

Here is a list of critical skills you require for this role.

Strong foundational knowledge of anatomy, physiology, biochemistry, pharmacology, and pathology

- Diagnostic skills
- Physical examination skills
- Soft skills like communication

2. PHYSICOTHERAPIST

A physical therapist helps individuals improve their physical movement and manage pain.

You require the following qualifications for this role.

- Clear NEET Exam
- Bachelor's degree in fields like biology, kinesiology, or exercise science
- Doctor of Physical Therapy (DPT)

Here are a few critical skills you require for this role.

- Manual therapy techniques
- Communications skills
- Attention to detail

3. DATA SCIENTIST

The job of the data scientist is to use statistical modeling techniques and computer science

knowledge to extract insights that drive business decisions.

The basic qualifications for this role are listed below.

- Bachelor's degree in computer science, statistics, or related fields
- Data science certifications can be beneficial

You require the following skills for this role.

- Strong knowledge of statistics and probability
- Data mining skills
- Data visualization skills
- Expertise in programming languages like Python



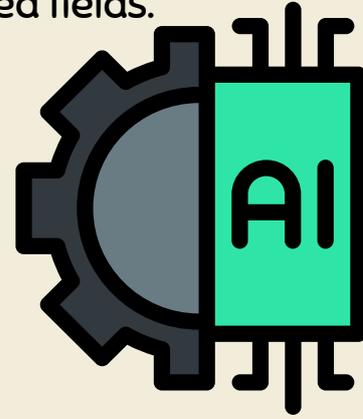
4. MACHINE LEARNING ENGINEER

A machine learning engineer designs, develops, and deploys machine learning models to solve complex problems.

- Bachelor's Degree in computer science, data science, or related fields.
- A master's degree in Machine Learning can be advantageous.

Here are the key skills you'll need to succeed in this role.

- Expertise of programming languages like R
- Data visualization
- Knowledge of statistics
- Problem-solving



5. ENVIRONMENTAL ENGINEER

An environmental engineer applies engineering principles to protect the environment and improve public health.

Here are some basic qualifications you require.

- A bachelor's degree in environmental engineering, civil engineering, or a related field
- A master's degree can help in career progression

You require the following skills to succeed in this role.

- Good knowledge of engineering principles, environmental science, and chemistry
- Analytical skills
- Understanding of computer-aided design (CAD) software
- Fieldwork skills



6. QUALITY ASSURANCE SPECIALIST

A Quality Assurance specialist's role is to ensure that pharmaceutical and biological products meet specific quality standards.

You require the following qualifications for this role.

- A bachelor's degree in a scientific field like chemistry, biology, or biotechnology.
- A master's degree in quality assurance or related field.

You have to possess the following skills.

- Knowledge of quality assurance principles, statistical analysis, and regulatory requirements
- Attention to detail
- Problem-solving

SHOULD I USE CHATGPT TO WRITE ESSAYS?



<https://shorturl.at/UfBe6>

Students can use ChatGPT to generate full essays based on a few simple prompts. But AI can't yet actually produce the high quality work skilled humans can. Students may also be asking themselves if they should use AI to write their essays for them and what they might be losing out on if they did. AI is here to stay and you can become better informed about what ChatGPT can and can't do, as well as the many benefits of writing your own essays.

ChatGPT is one of the most buzzworthy technologies today.

But what is it? How does it work? And – most important – should you use it to write your essays?

In addition to other generative artificial intelligence (AI) models, it is expected to change the world. In academia, students and professors are preparing for the ways that ChatGPT will shape education, and especially how it will impact a fundamental element of any course: the academic essay.

WHAT IS GENERATIVE AI?

- Artificial intelligence isn't a 21st-century invention. Beginning in the 1950s, data scientists started programming computers to solve problems and understand spoken language. AI's capabilities grew as computer speeds increased and today we use AI to organize data, as well as to find patterns and provide insights into it.
- But why the sudden popularity in recent applications like ChatGPT? This new generation of AI goes further than just data analysis. Instead, generative AI creates new content. It does this by analyzing large amounts of data – GPT-3 was trained on 45 terabytes of data, or a quarter of the Library of Congress – and then generating new content based on the patterns it sees in the original data.
- It's like the predictive text feature on your phone; as you start typing a new message, predictive text makes suggestions of what should come next based on data from past conversations. Similarly, ChatGPT creates new text based on past data. With the right prompts, ChatGPT can write marketing content, computer code, business forecasts, and even entire academic essays on any subject within seconds.

SHOULD I USE GENERATIVE AI OR NOT?

- The answer is complicated because, in some cases AI use is permitted, or even encouraged.
- If you don't know if it's okay to use AI for a particular assignment, there's an easy way to find out: Ask your instructor. Some courses may have specific rules or requirements about the use of AI that may carry serious penalties.
- But is generative AI as revolutionary as people think it is, or is it lacking in real intelligence?
- The Drawbacks of Generative AI
- It seems simple. You've been assigned an essay to write for class. You go to ChatGPT and copy and paste the essay prompt into the message box. You wait a few seconds and it generates the essay for you!
- But ChatGPT is still in its early stages of development, and that essay is likely not as accurate or well-written as you'd expect it to be. You may also be at risk of violating academic policies or committing plagiarism – whether intentional or not.

THE BENEFITS OF WRITING YOUR ESSAYS YOURSELF

Asking a robot to write your essays for you may seem like an easy way to get ahead in your studies or save some time on assignments. But, outsourcing your work to ChatGPT can negatively impact not just your grades, but your ability to communicate and think critically as well. It's always the best approach to write your essays yourself.

CREATE YOUR OWN IDEAS

Writing an essay yourself means that you're developing your own thoughts, opinions, and questions about the subject matter, then testing, proving, and defending those thoughts.

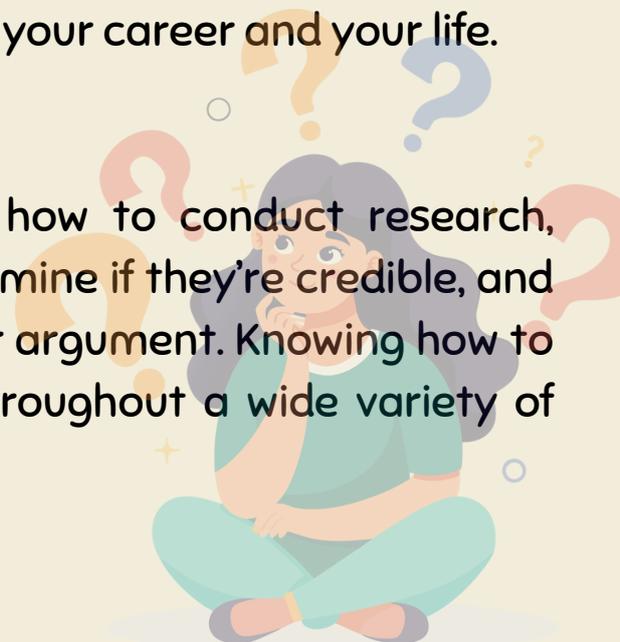
When you complete school and start your career, projects aren't simply about getting a good grade or checking a box, but can instead affect the company you're working for – or even impact society. Being able to think for yourself is necessary to create change and not just cross work off your to-do list. Building a foundation of original thinking and ideas now will help you carve your unique career path in the future.

DEVELOP YOUR CRITICAL THINKING AND ANALYSIS SKILLS

In order to test or examine your opinions or questions about a subject matter, you need to analyze a problem or text, and then use your critical thinking skills to determine the argument you want to make to support your thesis. Critical thinking and analysis skills aren't just necessary in school – they're skills you'll apply throughout your career and your life.

Improve your research skills

Writing your own essays will train you in how to conduct research, including where to find sources, how to determine if they're credible, and their relevance in supporting or refuting your argument. Knowing how to do research is another key skill required throughout a wide variety of professional fields.



LEARN TO BE A GREAT COMMUNICATOR

Writing an essay involves communicating an idea clearly to your audience, structuring an argument that a reader can follow, and making a conclusion that challenges them to think differently about a subject. Effective and clear communication is necessary in every industry.

Be impacted by what you're learning about

Engaging with the topic, conducting your own research, and developing original arguments allows you to really learn about a subject you may not have encountered before. Maybe a simple essay assignment around a work of literature, historical time period, or scientific study will spark a passion that can lead you to a new major or career.

How To Arrange Your Activities List on the Common App



<https://www.zerogpt.plus/blog/wp-content/uploads/2024/09/Common-App.png>

With only ten slots available and strict character limits, strategy is key. Your challenge is to condense all your experiences into a concise list that grabs attention. It's not just about describing how you spent your time. It's also about making a strong impression.

STEP 1: BRAINSTORM (DON'T SKIP THIS STEP!)

Let's ignore the character limit for a moment. It's time to wring every last drop of value from each of your activities. To do this, answer the following questions about each activity on your list.

- What did you do? Describe the activity.
- What problem(s) did you solve?

What skills did you develop? Include any awards or achievements you earned.

- What lessons did you learn?
- What impact did you have? (Think NUMBERS.)
- How did you apply what you learned?

STEP 2: SYNTHESIZE THE INFORMATION INTO YOUR ACTIVITY DESCRIPTION

Combine the above answers into a concise summary within the character limit. Keep these tips in mind:

- Highlight your impact, leadership, and the skills or lessons learned.
- Use action verbs ("Organized," "Led," "Enhanced," and "Addressed") instead of passive verbs (like "*Was responsible *for the volunteer schedules and organizing food donations.")
- Be specific. Saying "Volunteered at the local food bank every Saturday" is too vague. Tell admissions officers exactly what you did there.
- Quantify your impact by including numbers wherever possible – people affected/served, products sold, money raised. For example, "200 families each week" and "10 volunteers."
- Use abbreviations. Admissions officers know the character limit is...limiting. Don't worry about using perfect grammar or full sentences in this section. It's perfectly acceptable to abbreviate wherever possible.
- For example: "Chaired first school Model UN Club; coordinated weekly meetings for 30+ members."

TIPS FOR WRITING YOUR COMMON APP ACTIVITIES LIST

1. LIST ITEMS FROM MOST IMPORTANT (AT THE TOP) TO LEAST IMPORTANT.

They don't have to be in chronological order! List the most impactful ones first. Typically, this means your leadership roles. If you've held leadership positions in any of your activities, strategically place them at the top of your list.

2. FILL IN ALL 10 AVAILABLE SPACES, AND MAKE EVERY CHARACTER COUNT!

The only reason not to use all 10 spaces is if you do an activity that takes up all or most of your time – for example, you are an Olympic athlete.

Avoid using words that are redundant, and see how many words you can slash while still preserving the meaning. For example, here is a description that does NOT use space effectively:



3. BE ACCURATE AND SHOW GROWTH WHEN LISTING THE HOURS/WEEKS/YEARS OF INVOLVEMENT.

Admissions officers pay attention to the time you spent on each activity. Be sure the numbers you list make sense! They are also looking for sustained commitment or growth over time. Include at least a few activities that demonstrate this.

4. LIST SIGNIFICANT FAMILY RESPONSIBILITIES OR WORK COMMITMENTS, SINCE THAT IS SOMETHING YOU'RE DOING OUTSIDE THE CLASSROOM.

Did you have to help with your younger siblings at home, or get a job to help support your family? Include it in your Activities List, along with any skills you picked up or impact you made.

5. MAKE SURE YOUR LIST ACCURATELY REFLECTS YOUR PASSIONS, PRIORITIES, AND APPLICATION THEME.

Take a final look at your Activities List.

- Does it feel like “you”?
- Does it represent your last four years as well as your goals for the future? For example, if you are applying as an intended Computer Science major, did you do anything throughout high school that reflects this?
- Does it line up with what your school counselor or other writers of your recommendation letters would say about you?
- If not, you may need to reconsider your Activities List items!



VIDEO FOR THE MONTH

Julie Le talks about the importance of education, experience and knowledge in comparison to English proficiency as a Vietnamese-American. Her talk will emphasize how English is just a language and not a measure of intelligence.



(Video Link <https://www.youtube.com/watch?v=mmobvejOWtE>)

DYPIS UNIVERSITY FAIR 2025: CONNECTING STUDENTS TO GLOBAL OPPORTUNITIES



On 12th September 2025, D Y Patil International School, Worli, hosted its annual University Fair, a much-awaited event for students and parents exploring higher education pathways. Open to students from Grades 8 to 12 as well as interested participants from outside the school, the fair proved to be an enriching platform for academic discovery and career exploration.

With 50+ universities from across the globe including India, Hong Kong, Ireland, Australia, New Zealand, Canada, the UK, and the USA. The fair offered a truly international experience. University representatives engaged with students and parents to share insights on emerging egresses, from future-oriented STEM programs to interdisciplinary liberal arts offerings. They also provided practical advice on cracking entrance exams and preparing for college admission interviews, ensuring that students received firsthand guidance straight from university experts.

The event drew an enthusiastic response from the student body, parents, and the academic team, who valued the opportunity to interact directly with global institutions. Feedback gathered through testimonials highlighted the fair's impact in broadening perspectives and sparking confidence in making informed choices about higher education.

As a school community, DYPIS is committed to offering such platforms that bridge the gap between classrooms and campuses worldwide. The University Fair 2025 reaffirmed our mission of empowering students with knowledge of extensive degree options and emerging career fields. We look forward to hosting more such events in the coming years, continuing to inspire and prepare our students for their journeys ahead.



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