

# Career Counsellor

## Counsellor's Newsletter

### IN THIS ISSUE

Most In-Demand Careers for the Future

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7 Top Design Schools in India

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Community Service on College Applications:

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Biochemistry

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Bibliography

### Jobs of the Future (2025+)



<https://i0.wp.com>

#### 1. Cybersecurity Engineer

Cybersecurity engineers are responsible for looking after our data and ensuring that the data we give to companies and apps are stored correctly and safely. They design policies to help prevent and defend against phishing, hacking, cyberattacks, etc.

Why is this one of the jobs in demand in 2025 and beyond?

Data protection is a major concern. With businesses having more access to data in the future, protecting that data should be a high priority, and that's where a Cybersecurity Engineer would come in. According to the Bureau of Labor Statistics, the number of cybersecurity jobs will grow 32% in the next decade.

It's possible that companies may prefer to have an on-site cybersecurity engineer to help protect the data they collect and be immediately on hand if a cyberattack targets them.

## 2. Artificial Intelligence (AI) Specialist

Did you know that, according to Data Prot, 37% of businesses use AI? That's 37% of businesses across ALL industries – meaning that AI specialists will likely be a job in demand in the future.

The 'computers' you play against in video games? AI.

Google Maps? AI.

Amazon Alexa? AI.

Weather App on your phone? AI.

According to Search Logistics, by 2025, it's predicted that there will be a job demand of 97 million people in AI-related industries. This includes jobs such as AI and Machine learning specialists Process automation specialists big data specialists Data scientists and data engineer's Analytics specialists.

## 3. Blockchain Specialist

A report by PwC's revealed that blockchain will provide more than 40 million jobs at a global scale by 2023. The main reason is because the future of finance will be heavily influenced by the rise of blockchain technology.

Blockchain's promise lies in its ability to provide a secure, transparent, and decentralized platform for recording transactions. This technology ensures that each transaction is encrypted and linked to the previous one, creating an immutable record that is nearly impossible to alter.

Such a framework introduces a new level of security and trust in digital transactions, which is crucial for the future of finance—a sector increasingly moving towards digitization.

## 4. Data Analyst

The World Economic Forum listed data analysts as the number two growing jobs in the U.S. Similarly, the Bureau of Labor Statistics reports that data occupations will have extremely high growth rates.

As we move into a more data-driven world, the demand for data analysts is expected to skyrocket. Data analysts are responsible for collecting and analyzing large sets of data to identify patterns and trends that can help businesses make better decisions. For those aiming to break into this field, it's essential to develop data analysis skills through comprehensive courses.

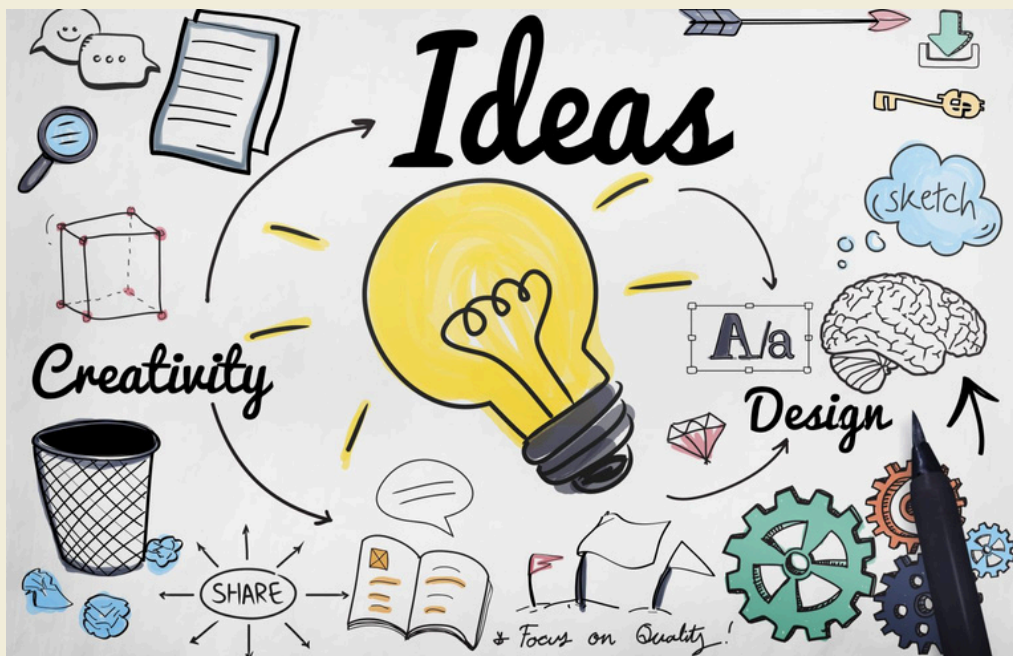
## 5. Mental Health Experts

The recent pandemic significantly increased the need for mental health specialists. And while once it was a stigma and a taboo, now mental health is getting the spotlight it deserves, with people and society as a whole showing it some real support.

With everything that went down during the pandemic – like feeling isolated, dealing with losses, and all the uncertainty about jobs and health – people started to realize just how crucial taking care of your mental health is. This shift in attitude has sparked a wave of support for mental health, from more resources popping up to making therapy and support more accessible to everyone.

In 2022, the worldwide market for mental health services was estimated to be worth \$375.21 billion and is projected to grow to \$532.86 billion by 2030. This growth is anticipated to occur at a compound annual growth rate (CAGR) of 3.85% from 2023 to 2030.

## 7 Top Design Schools in India



India has witnessed a surge in demand for design professionals across industries such as fashion, animation, interior design, and product design. Aspiring designers seek institutions that offer cutting-edge curricula, industry exposure, and hands-on learning experiences. Here are seven top design schools in India that have carved a niche in design education.

### 1. National Institute of Design (NID), Ahmedabad

NID Ahmedabad is India's premier design institution, globally recognized for its rigorous curriculum and interdisciplinary approach. Established in 1961, NID offers undergraduate and postgraduate programs in various design disciplines, including Industrial Design, Communication Design, and Textile Design.

#### Courses Offered:

- B.Des in Industrial Design, Textile Design, Animation Film Design, etc.
- M.Des in Product Design, Graphic Design, and Digital Game Design

#### Placements:

Graduates secure roles in top design firms, multinational companies, and startups, with companies like IDEO, Tata Motors, and Infosys actively recruiting.

### 2. National Institute of Fashion Technology (NIFT), New Delhi

NIFT is India's leading fashion design institute, established in 1986. It offers undergraduate and postgraduate programs in Fashion Design, Fashion Communication, and Accessory Design. With state-of-the-art infrastructure and strong industry tie-ups, NIFT ensures students are equipped with contemporary skills to thrive in the fashion industry.

#### Courses Offered:

- B.Des in Fashion Design, Leather Design, Knitwear Design
- M.Des in Design Space
- Master of Fashion Management

#### Placements:

NIFT alumni work with brands like H&M, Zara, Raymond, and international fashion houses. The institute has strong placement support with high salary packages in the fashion industry.

### 3. MIT Institute of Design (MITID), Pune

MITID, a part of MIT Art, Design, and Technology University, is known for its innovative curriculum and hands-on learning approach. The institute offers specialized courses in Product Design, UX Design, and Transportation Design, among others. The emphasis on research and industry collaboration sets MITID apart from its counterparts.

#### Courses Offered:

- B.Des and M.Des in Product Design, Transportation Design, UX Design

#### Placements:

Graduates have secured placements in companies such as Tata Technologies, Volkswagen, and Whirlpool, with roles in UI/UX, product innovation, and industrial design.

#### 4. Ajeenkya D Y Patil University, Pune

Ajeenkya DY Patil University, Pune is an emerging hub for creative education in India. The design school offers a diverse range of undergraduate and postgraduate programs in UI/UX Design/ Transportation Design/ Product Design/ Visual Communication and Fashion Design.

#### Courses Offered:

- B.Des in UI/UX Design/ Transportation Design/ Product Design/ Visual Communication and Fashion Design
- M.Des in Transportation Design and UI UX

#### Placements:

The institution collaborates with top design firms and corporate houses like SAP, Amazon, and Wipro, ensuring strong placement support for students.

#### 5. Srishti Institute of Art, Design, and Technology, Bengaluru

Srishti Institute is known for its unique pedagogical approach, emphasizing independent thinking, creativity, and experimentation. The institute offers programs in Contemporary Art, Digital Media Arts, and Public Space Design, among others.

#### Courses Offered:

- B.Des in Digital Media, Public Space Design, Industrial Arts
- M.Des in Human-Centered Design, Visual Communication

#### Placements:

Graduates find opportunities with companies such as Adobe, Microsoft, and animation studios, often taking up roles in interaction design, visual communication, and creative media.



## 6. ISDI (Indian School of Design and Innovation), Mumbai

ISDI Mumbai collaborates with Parsons School of Design, New York, to offer globally benchmarked programs. It provides courses in Interior Design, Fashion Business Management, and Communication Design, among others.

### Courses Offered:

- B.Des in Interior Design, Strategic Design & Management
- M.Des in Fashion Business Management.

### Placements:

ISDI graduates work with companies like Vogue India, Amazon, and interior design studios, with strong industry exposure during their studies.

## 7. Pearl Academy, Delhi

Pearl Academy is one of India's leading private design institutions, known for its programs in Fashion, Communication, and Interior Design. With international collaborations, cutting-edge infrastructure, and an industry-aligned curriculum, Pearl Academy ensures its students gain practical exposure and professional readiness.

### Courses Offered:

- B.Des in Fashion Design, Media & Communication
- M.Des in Fashion Styling, Interior Architecture

### Placements:

Pearl Academy has tie-ups with renowned brands like Myntra, Tommy Hilfiger, and Walt Disney, providing students with excellent career prospects.

## Conclusion

Design education in India has evolved to meet the growing needs of industries requiring creative solutions. These top design schools provide a solid foundation for aspiring designers through rigorous training, global exposure, and industry collaborations. Whether it's fashion, product design, or communication design, these institutions offer promising pathways for students to excel in their creative careers.

# Community Service on College Applications: Do's and Don'ts

Community service can be incredibly meaningful for young people during the college process and beyond. However, many students engage in community service just to pad their résumés, gain references and recommendations, or have an easy topic for their college essays.



<https://www.pproeed.com>

In this article, we'll examine the ways that community service can be both helpful and harmful to you in the admissions process.

## The Dos of Meaningful Community Service

If you choose to participate in community service, it should not just be for your college applications. It should be because you care about your community and the work you choose to do. That being said, meaningful community service can strengthen your college applications. You just have to make sure that you choose the right projects and address them in the right ways.

Here are some tips to ensure that your involvement strengthens—rather than undermines—your college applications.

### Find service opportunities that support your interests

When applying to colleges, you'll create what we call your candidate profile: a cohesive application theme that showcases your academic, extracurricular, and personal interests and how they overlap. Your community service experiences should align with this profile.

Say you have an incredible passion for education and you want to become a teacher. You might find ways of tutoring your peers, or you could work with a company that provides educational resources to underserved communities. If you want to become a healthcare professional, you might volunteer at the Red Cross or your local hospital. And if you're interested in environmental science, you could organize local gardening initiatives or participate in cleanups. No matter where your interests lie, the possibilities are endless!

### Make an active effort to contribute to your community

Maybe you're not thrilled with the service opportunities available in your community, but you still want to give back. In that case, consider creating your own club, organization, or initiative!

Admissions Officers love when students take their extracurriculars into their own hands and create their own opportunities. And this doesn't have to be too official—grab some friends, brainstorm some ideas, and get to work.

Remember, of course, that no matter what you do, you should be passionate about your contributions to your community. You should also be able to clearly explain why you chose to pursue this specific service project.

### Show a demonstrated interest in service

Maybe you're just passionate about community service and contributing to social good overall! This might mean that you'd rather participate in many smaller projects than commit to larger, more specific initiatives. That's all right, too! You can likely find many clubs—perhaps your school's Key Club or National Honor Society—with this exact purpose. If this is your speed, make sure that you display a demonstrated commitment to these clubs or service projects. Participate in as many projects as possible, and help in any way you can. You may even look for leadership roles within these clubs to maximize your involvement.

### Highlight your specific impact

When you write about your community service experience in your applications, be sure to highlight your specific contributions.

Let's say you participated in a fundraising event that raised \$5,000, and you personally brought in \$2,000 of that through cold-calling potential donors. You would definitely want to highlight that achievement! This shows Admissions Officers your passion for your projects as well as your drive to make a tangible difference.

### The Don'ts: Wrong Strategies for Approaching Community Service

While community service can strengthen an application, you want to be careful that it doesn't seem like you're doing it just to impress colleges. Here are some of the ways that community service can hurt you in the admissions process.



### Participate in just a little of it

If you want to use community service as a part of your candidate profile, truly commit to it! Too often, applicants will focus on a community service experience where they went away for a week or so (Habitat for Humanity and Doctors Without Borders are great examples of this) and never thought about it again. While these organizations do meaningful work, a week-long service trip will not add to your profile or illustrate your passions.

If you choose to participate in a short-term service opportunity, brainstorm how you can supplement that experience once it has finished. Ask yourself what you liked about that experience and how you might continue doing similar work. See if there are other ways you can become involved in the organization, even if you can't return to the "front lines."

Additionally, be wary of entering other people's communities. If you choose to go on a service trip to another country, do so with respect and self-awareness.

### Write about how community service made you grateful

The whole point behind community service is to serve the community, and the whole point of your college essays is to show how your experiences have made you the person that you are. However, Admissions Officers have seen too many essays where students write about their gratitude after helping others in need. While this is a great takeaway, it is one that almost everybody who has done community service experiences!

When writing an essay about service, focus on how it has impacted your life and future. Did a project inspire you to continue doing similar work on your own? Did an initiative reveal to you your desired academic and professional path? Or did you make an active effort to recruit your family and friends because you felt so passionate about the cause?

### Rely on passive actions

Passive actions (such as donations) can be deeply impactful for service organizations. However, in the admissions process, these passive actions do not add to your candidate profile. As with any extracurricular, you should be actively involved in your community service experiences.

For example, a monetary donation of any amount is a stellar way to support a cause, but someone can give money with a simple click of a button. It doesn't take much thought, time, or real action. We'll want to be sure to stay away from mentioning any actions that didn't require you to specifically give your time and energy.

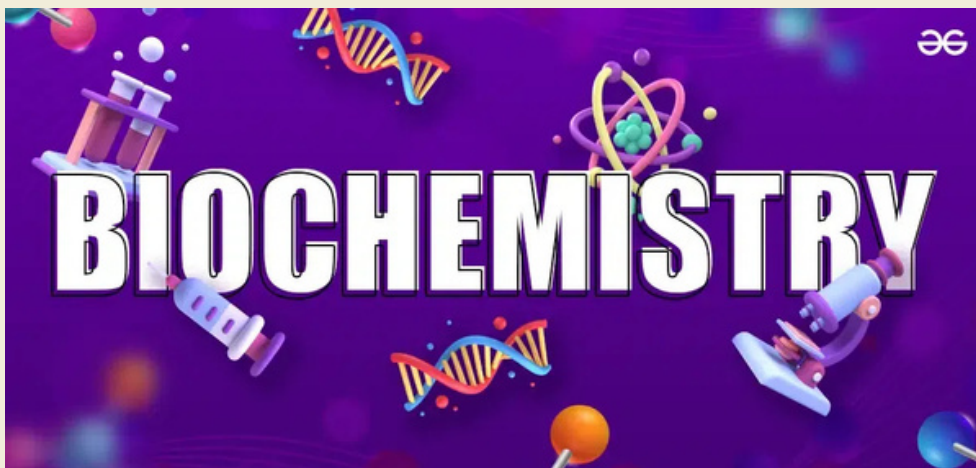
Additionally, some students will sign up to participate in community service clubs just to be a member. They'll show up to a couple of meetings, but they'll never actually go to any events or contribute in any meaningful way. If this sounds like you, you definitely don't want to mention it in your applications.

### Final Thoughts

As you can tell, community service can improve your college applications quite a bit—but only if you're smart about it! Ultimately, Admissions Officers are looking to see that your extracurriculars support your candidate profile: that they make sense in relation to the interests that you have and the values that you hold.

Conduct some research to see what service opportunities are available to you, both in your school and in the community. Make sure that no matter what you decide to do, that you are making a demonstrated effort to positively and actively impact your cause.

## What is Biochemistry? A Dive into Life's Molecular Foundations



<https://media.geeksforgeeks.org>

Biochemistry is a fascinating field that explores the chemical processes within living organisms. The field and practice delve into the smallest building blocks of life, molecules—like proteins, carbohydrates, lipids, and nucleic acids—to understand how they interact and contribute to the functioning of cells and organisms.

Individuals entering a range of professions, from medicine and clinical laboratory science to biomedical research, need to understand the inner workings of the cell which is why many graduate programs in the sciences require a fundamental understanding of biochemistry. Through the study of biochemistry, students learn how interactions among molecules occur, how they are controlled, and how these interactions impact cellular processes. In this guide, find out how biochemistry can empower students to chart their path toward educational and career goals.

## Exploring the Basics

At its core, biochemistry combines principles from both biology and chemistry to study living matter. Imagine you're looking through a microscope at a cell. Biochemistry helps explain and convey what's happening inside that cell at a molecular level. It's like deciphering the tiny machines and chemical reactions that keep living organisms alive and functioning.

Some key components and processes of cells are proteins, DNA and genes, and energy and metabolism. Let's dive into these concepts a bit more.

## Proteins: Nature's Workers

Among the most important molecules biochemists study are proteins. Proteins are like the workers in a factory. They do all sorts of jobs, from helping cells communicate to breaking down food for energy. Understanding how proteins are made and how they function helps us understand many biological processes.

## DNA and Genes

Another crucial area of biochemistry is genetics. Genetics is the study of how traits are passed down from parents to offspring. At the heart of genetics is DNA, the molecule that contains our genetic information. Biochemists study how DNA works, how it replicates itself, and how it codes for proteins – essentially, how it makes us who we are.

## Energy and Metabolism

Biochemistry also examines how organisms obtain and use energy. This field, known as metabolism, involves all the chemical reactions that happen within cells to keep them alive. From breaking down food to releasing energy, biochemists study the intricate pathways that make life possible.

## Why Study Biochemistry?

Studying biochemistry opens doors to understanding the fundamental processes of life. It's like uncovering the secrets of how living things are built and function. Whether you're curious about how your body works or interested in solving global challenges like disease and food security, biochemistry provides the foundation for making meaningful discoveries.

## Applications in Medicine and Beyond

Biochemistry's impact on medicine is profound and far-reaching. By studying the molecular mechanisms of diseases, biochemists can uncover how illnesses develop and progress.

This knowledge is crucial in developing new drugs and treatments. For instance, understanding how specific proteins malfunction in diseases like cancer or Alzheimer's disease can lead to the design of targeted therapies that directly address these molecular issues. Additionally, biochemists work on vaccines, gene therapies, and diagnostic tools that have revolutionized healthcare, allowing for more precise and effective treatment options.

Beyond medicine, biochemistry plays a vital role in agriculture. Biochemists work to enhance crop production by studying plant biochemistry and genetics. They help develop crops that are more resistant to pests, diseases, and environmental stresses like drought. This is especially important in a world facing climate change and a growing population, where the demand for food is ever-increasing. By manipulating the biochemical pathways in plants, scientists can also enhance nutritional content, ensuring that the food we eat is not only plentiful but also healthy.

The influence of biochemistry extends into environmental science as well. Biochemists study how pollutants affect ecosystems and work on bioremediation strategies to clean up contaminated environments. They explore ways to break down toxic substances, like oil spills or industrial waste, into harmless components. This research is crucial for maintaining healthy ecosystems and protecting wildlife. Additionally, biochemists are involved in the development of sustainable energy sources, such as biofuels, which are derived from biological materials and offer a cleaner alternative to fossil fuels.

### Careers in Biochemistry

If you enjoy solving puzzles and are curious about how life works at a molecular level, a career in biochemistry might be for you. Biochemists can work in a variety of fields, including:

**Medical Research:** Biochemists in this field study diseases and work to develop new treatments and vaccines. They play a key role in understanding conditions like cancer, diabetes, and genetic disorders.

**Pharmaceuticals:** Working for pharmaceutical companies, biochemists help discover and develop new drugs. They study how these drugs interact with the body and how they can be made more effective.

**Agriculture:** Biochemists in agriculture focus on improving crops and livestock. They may develop new fertilizers, study plant genetics, or work on ways to protect plants from pests and diseases.

**Environmental Science:** Some biochemists work to understand how pollution affects living organisms and develop ways to reduce environmental impact. This can include studying how toxic chemicals interact with cells and how to break them down.

**Forensic Science:** In forensic science, biochemists analyze biological samples from crime scenes. They might study DNA, blood, or other evidence to help solve crimes.

**Education and Academia:** For those who love teaching and research, becoming a professor or lecturer in biochemistry can be a fulfilling career. You can inspire the next generation of scientists while conducting research that expands our understanding of life.

**Conclusion:** In essence, biochemistry is the study of the chemical processes that occur within living organisms. The field bridges the gap between biology and chemistry, focusing on molecules and their interactions to explain life's mysteries. From proteins and DNA to metabolism and disease, biochemistry offers endless opportunities for exploration and understanding.

So, the next time you hear about biochemistry, remember it's about unraveling the chemical secrets that make life possible—from the smallest cell to the largest tree.

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