

Personal Development Plan

For outlining career goals and planning the steps to achieve them

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Vision and goals

Career vision

"To become a research scientist specializing in biofuel development" or "To work in biopharmaceutical R&D focusing on personalized medicine."

Career goals

Short-term goals

- Strengthen Core Subjects
- Learn Basic Laboratory Skills
- Start Technical Skill Building
- Mini Projects & Competitions

Long-term goals

- Choose a Specialization
- Do Internships & Research Work
- Higher Studies or Job Preparation
- Contribute to Sustainability or Innovation

Skills Assessment

Strengths

Good understanding of biology, chemistry, and basic engineering principles. Always willing to explore new concepts in biotechnology and research.

1. Practical Mindset
2. Good Analytical and Observation Skills
3. Adaptability and Quick Learning
4. Interest in Research and Innovation

Areas for improvement

- 1. Advanced Laboratory Techniques** – Need more exposure to specialized methods such as PCR, ELISA, and DNA extraction.
- 2. Research Writing Skills** – Improve scientific writing, referencing, and report structuring for future publications.
- 3. Data Analysis and Interpretation** – Learn to use tools like Excel, R, or Python for statistical and bioinformatics data analysis.
- 4. Time Management** – Develop a consistent study and project schedule to balance coursework, labs, and extracurriculars.



Action Plan

Objective / Goal	Action Steps	Resources / Support Needed	Timeline	Expected Outcome
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Strengthen basic knowledge in biotechnology	Attend all core classes, take notes, review topics weekly	Textbooks, online resources (NPTEL, Coursera)	1st–2nd year	Strong theoretical foundation
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Improve laboratory skills	Participate actively in lab sessions, seek faculty guidance, volunteer for extra lab work	College lab, lab manuals, mentorship	Ongoing	Confident in handling instruments and experiments
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Learn data analysis & bioinformatics	Take online courses on Python, R, or bioinformatics databases (NCBI, BLAST)	Coursera, edX, NPTEL	Within 1 year	Able to analyze experimental data
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Enhance research & project experience	Join student research groups, do mini-projects under professors	College research clubs, mentors	2nd–3rd year	Research exposure and project experience
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Learning and development opportunities

Category	Opportunities	Purpose / Benefits
Academic Learning	Focus on biotechnology core subjects such as Cell Biology, Biochemistry, Microbiology, and Genetics	Build a strong conceptual foundation for higher studies and research
Laboratory Learning	Participate actively in practical sessions and learn basic lab skills like pipetting, culturing, and microscopy	Develop hands-on technical experience essential for biotech research
Online Courses & Certifications	Enroll in courses on Coursera , NPTEL , or edX – topics like <i>Bioinformatics, Genetic Engineering, Biostatistics, Python for Biology</i>	Gain additional skills and knowledge beyond the classroom
Workshops & Seminars	Attend college-level and national workshops, guest lectures, and webinars on emerging biotech topics	Stay updated with industry and research trends
Research Opportunities	Participate in student research projects, mini-projects, or innovation contests	Apply theoretical knowledge in real experiments and develop research aptitude



You can do whatever
you put your mind into.

