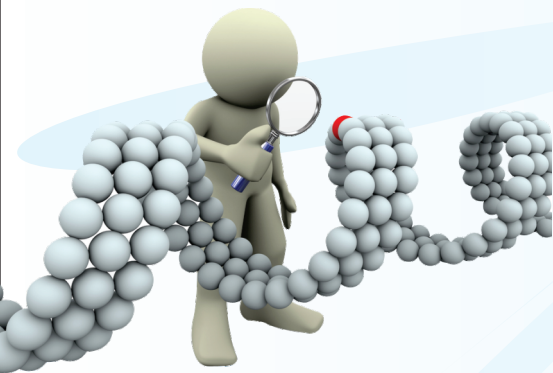


# Introduction to Biotechnology

Why? Who?  
What? Where?



## Why Biotechnology?

Biotechnology has emerged as a far reaching technology that helps to improve the quality and sustainability of life. Scientists have recognised biotechnology as the 'technology of hope'. It is a multi disciplinary area and includes subjects like biology, engineering, medicine, agriculture, physics, chemistry, computer science and mathematics.

## Who should be a Biotechnologist?

Any student who:

- Desires to pursue biological studies
- Has a scientific aptitude
- Is creative and has problem solving skills
- Is interested in academics and research
- Is analytical and has IT skills

## Specialisations within Biotechnology:

- Animal Biotechnology
- Food Biotechnology
- Veterinary Biotechnology
- Medical Biotechnology
- Marine Biotechnology
- Genetic Engineering
- Industrial Biotechnology
- Microbiology
- Nanotechnology
- Seri-biotechnology



**Did you know?** Biotechnology has created more than 200 new therapies and vaccines, including products to treat cancer, diabetes, HIV/ AIDS and autoimmune disorders.

## Where do Biotechnologists work?

- Astra Zeneca
- Biocon India
- Biotech India
- GSK Pharma
- Dr. Reddy's Laboratories

## Best colleges for Biotechnology in:

### India:

- All India Institute of Medical Sciences- New Delhi
- IITs'
- Satyabhama Institute of Science & Technology-Chennai

### USA

- University of Pennsylvania
- University of California-San Francisco
- John Hopkins University

### UK

- University College of London
- Imperial College
- University of Edinburgh

### Canada

- Carleton University
- University of Toronto
- University of British Columbia

HAPPY  
Discovering

What are the prospects after studying this subject? Does it open up international opportunities?  
Answer these and other such questions by reading and watching expert views at [www.university.com/courses](http://www.university.com/courses)

**U**niversity   
Discover & be discovered

# Discover the Career Options Right for You

## 1 Initial Options



### What are your career ideas?

If you haven't already given it a thought, then base it on influences from:

- Parents, family and friends
- Passion towards a subject
- Personal experiences
- Media and internet

Univariety probes and provides answers

### Initial Options

Go to step 2

### Instructions

- Follow this process, one at a time, to finalise career choices
- If the answer is 'No' 'at any stage then start from stage 1
- Do in-depth self research
- Complete details of this process and the questions around a 'Typical Day' Test are at [www.univariety.com/courses](http://www.univariety.com/courses)

## 2 Hypothesis



### Do you like it?

Remember the activities from the past which gave you joy and happiness. Does this career option similarly excite you?

### Initial Hypothesis



### Can you do it?

- Do you know how long it takes to get the degree?
- Do you like the subjects which you will study?
- Can you perform to get through to good colleges?
- Do you have the financial resources to support the degree?

### Final Hypothesis

Go to step 3

## 3 Validation



### Do you want it?

Do you like the:

- Nature of work you will do?
- Type of people you will deal with?
- Physical and mental effort required?
- The challenge it poses?



### Will it fulfill your and your family's ambitions?

Will this give you a good:

- Lifestyle?
- Time with family and friends?
- Salary and money potential?
- Possibility of being famous?

### Validated Hypothesis

Go to step 4

## 4 Finalisation



### 'Typical Day' Test?

*"If you want to know the road ahead, then ask someone who has travelled it."*

- Ancient Chinese Proverb

Here, we ask you to identify 2 - 3 people who have the same career that you have chosen and brought to this stage. Observe and ask questions to understand the 'typical life' in that career



## Decision

### Tools

- Discussion within the family and friends
- Univariety Website – Career Section
- Sessions with Univariety Counsellors
- Internet, books and other media