

Botany- A field of science

A career in Botany might just be one of the most preferred careers in India. Botany as a subject is related to the study of plants and a career in it would mean studying in depth about *fungi, algae, plants, diseases, growth, metabolism and the structure* between different groups. When planning a career in Botany, the job profile can include study of plants, research, working with industries, teaching, self-employment, and being a part of many more fields.

A person who works in this field is called a botanist. It will be the job of the botanist to study plant life along with finding solutions to problems related to that of forest and agriculture. There are also botanists who deal with space travel agriculture, artificial environments, hydroponics and various other interesting areas of research.

Botanists are required by varied organisations ranging from multinationals to research organisations to hospitality and tourism bodies, depending upon the nature of their activities. They fit into different roles depending on the activity of the organisation and evolve into senior positions at high salaries.

Eligibility for Botany Courses

For admission to a Bachelor's degree program, the candidate needs to pass his higher secondary education or 10+2 with biology, chemistry and physics as the main subject with a minimum of 55 to 60 per cent. The duration of the UG programs is mostly three years. In order to take admission into a Master's degree program, the candidate must have done their bachelor's degree in the relevant subject. The duration of the PG programs is mostly two years.

Various Botany courses

There are courses like Bachelor of Science in Botany, Bachelor of Science (Hons) in Botany, Master of Science in Botany, Master of Science in Botany and Forestry, Master of Science in Applied Botany, Master of Science in Herbal Science, Post Graduate Diploma in Medico botany, Post Graduate Diploma in Plant Biodiversity which one can study under the field of Botany and later be a part of this vast field.

Since the world of Botany is very vast field and it would one person to specialize in a particular field to be able to share his/her expertise on a particular subject. Some of the specializations available for botany are:

- Cytology
- Genetics
- Lichenology
- Economic botany
- Palynology
- Palaeobotany
- Bryology
- Ethnobotany
- Phycology
- Phytochemistry
- Forestry
- Plant morphology
- Phytopathology
- Plant anatomy
- Plant physiology
- Plant genetics

- Agronomy
- Horticulture
- Plant ecology
- Plant systematics

Botany Career Opportunities and Job Prospects

After duly completing a bachelor's education in Botany, a candidate can look forward to being a part of the industry by working as a technician, whereas, a candidate after completing his/her master's education can look forward to working with some industry giants or being a part of good research teams.

The amount of diversity in the field of Botany gives it students to choose their specializations as per their choice, aptitude and interests. There is huge scope of being a part of this industry merely keeping in mind the amount of diversity it has to offer.

One can be a part of any reputed organization as a

Plant explorer: Botanist with a passion for plants who could be a photographer, writer, expeditioner, etc

Conservationist: Is an individual who works for the conservation of the environment and is often linked to organisations working for the cause.

Ecologist: A person who works for the eco-system and a balanced environment.

Environment consultant: Some botanists qualify to work as environmental consultants, providing inputs and advice for the conservation of the environment.

Horticulturist: A horticulturist knows the science behind different plants, flowers, and greenery. They conduct research in gardening and landscaping, plant propagation,

crop production, plant breeding, genetic engineering, plant biochemistry, and plant physiology.

Plant biochemist: Biochemists study the chemical and physical principles of living things and of biological processes, such as cell development, growth, heredity, and disease.

Molecular biologist: Molecular biologists conduct research and academic activities. The research component involves the study of biological structures in well-equipped laboratories with advanced technology to help them explore complex molecular structures and their particular functions. The equipment may include microscopes, lab centrifuges, computers with specific software that allows them to analyze obtained data, and many more.

The number of professions botanists can go into nowadays is endless. Moreover the application of plant sciences improves the yield and supply of medicines, foods, fibers, building materials and other plant products. The knowledge of plant sciences is essential for development and management of forests, parks, waste lands, sea wealth etc.

Few of the industries which one can work with are:

- Chemical Industry
- Food Companies
- Arboretum
- Forest Services
- Biotechnology Firms
- Oil Industry
- Land Management Agencies
- Seed And Nursery Companies
- Plant Health Inspection Services

- National Parks
- Biological Supply Houses
- Plant Resources Laboratory
- Educational Institutions

Pay scale

The pay scale of a botanist is very high, but these scales vary for a botanist in the private and government sector. Needless to say, that the pay scale depends on qualification, designation, experience and skills of an individual. Those interested in being a teacher or researcher can expect a salary ranging from Rs 18,000 to Rs 20,000 per month. In other sectors, a candidate can initially expect their pay scale to be somewhere between Rs 15,000 to Rs 25,000 per month and will only increase with the advent of time and experience.

Universities/Colleges offering Botany Courses in India

- Thames Degree College, Hyderabad
- Khalsa College, Amritsar
- A.B.N. Seal College, West Bengal
- A.V. Kanthamma College for Women, Karnataka
- A.V.C. College, Mannampandal, Tamil Nadu
- Maharshi Dayanand University
- Banaras Hindu University
- Aligarh Muslim University
- A.V. Postgraduate College, Hyderabad
- A.V.V.M Sri Pushpam College, Thanjavur
- Acharya Nagarjuna University, Guntur

- Acharya Narendra Deo College of Pharmacy, Uttar Pradesh
- Aggarwal Post Graduate College, Rajasthan
- Acharya Narendra Dev College, New Delhi

Q. What's the scope after B.Sc in botany?

A. There is great scope after B.Sc in botany. After the completion of your Bachelor of Science in Botany, you can work in different sectors such as Nursery Farms, Lecturer at a College or University, Environmental Consultancies, Pharmaceutical Company and Medical Content Writing.

Q. What job-oriented courses are there after a B.Sc in botany?

A. Once you have completed your graduation in botany you can prepare yourself for M.Sc courses. Different universities offer different courses such as M.Sc in genetics and plant breeding, M.Sc in plant biotechnology and much more.

Q. What are the different fields after a B.Sc in botany?

A. After the completion of B.Sc in botany, you can work in different fields such as Nursery Farms, Medical Content Writing, teaching at Colleges and Universities, Environmental Consultancies and Pharmaceutical Company.

Q. Where are the job opportunities after an M.Sc in botany?

A. After the completion of M.Sc in botany, you can work in public and government sector as well. You can get a job role of Plant Taxonomy, Weed Scientists, Ethnobiology,

Plant Scientists, Pathology, Palynology, Plant ecology and much more. You can make a career in different companies such as Chemical Companies, Nurseries, Seed Companies, Biotechnology Firms, Fruit Growers, Food Companies, Oil Industry and much more.

Q. What are the opportunities for plant biotechnology?

A. There are different job opportunities for plant biotechnology. You can make your career as a Genomics technician, Agricultural and Food Science Technician, Chemistry Quality Control Technician, Environmental Health & Safety Technician, Clinical Research Associate, Environmental Science and Protection Technician, Compliance Specialist and much more.

Q. What are the uses of botanical names?

A. Botanical names are also known as scientific name which can define the fragrances and colours of flowers or leaves. Botanical names are common for a particular plant. It makes it easy to understand, the speciality or features of the plant.

Q. Which one has better career options: botany or zoology?

A. Both courses have good opportunities respectively. Botany has different subjects to study while zoology has an entirely different curriculum. The student can choose between botany or zoology as per his interest. Both courses have great scope. If one is interested in the flora, then opt for Botany and if one is interested in fauna then go for a course in zoology.

Q. What is the salary of people working in the botany field?

A. As a fresher, the candidate gets between 20k to 25k per month in botany field. After getting experience, the candidate can get a better salary. The average salary of people working in botany field in India is 5, 50,000 per annum. A botanist gets a very good salary and bonus as well.

List of Colleges

#1

Panjab University -

Chandigarh |AICTE Approved

₹ 12,000- M. Sc- 1st Year Fees

Rating: 7.8 / 10

#2

Rashtrasant Tukadoji Maharaj Nagpur University - [RTMNU]

Nagpur, Maharashtra |UGC, AIU Approved

₹ 27,030- M.Sc- 1st Year Fees

Rating:7.5 / 10

#3

Lovely Professional University

Jalandhar, Punjab |NCTE, COA, PCI, IAP, BCI Approved

₹ 96,000- M.Sc- 1st Year Fees

Rating:8.2 / 10

#4

Ranchi University

Ranchi, Jharkhand | UGC Approved

₹ 2,850- M.Sc- 1st Year Fees

Rating: 7.6 / 10

#5

Shoolini University logo

Solan, Himachal Pradesh | BCI, UGC, NBA Approved

₹ 150,000- M.Sc- 1st Year Fees

Rating: 8.5 / 10

#6

DAV University

Jalandhar, Punjab | ICAR, UGC Approved

₹ 65,000- M.Sc- 1st Year Fees

Rating: 8 / 10

#7

Nalanda Open University

Patna, Bihar | UGC Approved

₹ 4,400- M.Sc- 1st Year Fees

Rating: 7.2 / 10

#8

Apex Professional University - [APU]

Pasighat, Arunachal Pradesh | UGC Approved

₹ 74,000- M.Sc- 1st Year Fees

Rating: 7.4 / 10

#9

Akal University - [AU]

Bathinda, Punjab | NCTE, UGC Approved

₹ 52,000-M. Sc- 1st Year Fees

Rating: 7.7 / 10

#10

PK Roy Memorial College

Dhanbad, Jharkhand | UGC Approved

₹ 1,170-M. Sc- 1st Year Fees

Rating: 6.6 / 10

#11

All India Jat Heroes Memorial College

Rohtak, Haryana

₹ 55,000-M. Sc- 1st Year Fees

Rating: 7.3 / 10

#12

Alagappa Institute of Technology -
Chennai, Tamil Nadu |AICTE Approved
₹ 40,000- M.Sc- 1st Year Fees

#13

Gujarat Ayurved University - [GAU]
Jamnagar, Gujarat |CCIM, UGC Approved
₹ 40,000- M.Sc- 1st Year Fees

Rating:8.1 / 10

#14

Jiwaji University - [JU]
Gwalior, Madhya Pradesh |UGC Approved
₹ 32,320- M.Sc- 1st Year Fees

Rating:7.5 / 10

#15

The Global Open University - [TGOU]
Dimapur, Nagaland |UGC Approved
₹ 24,125- M.Sc- total fees

Rating:7.7 / 10

#16

Uttarakhand Open University - [UOU]
Nainital, Uttarakhand

₹ 18,150- M.Sc- 1st Year Fees

Rating:8 / 10

#17

Manoharbai Patel Post Graduate College of Art Commerce
and Science

Bhandara, Maharashtra

#18

Acharya Nagarjuna University, Centre For Distance
Education - [ANUCDE]

Guntur, Andhra Pradesh |UGC Approved

₹ 11,080- M.Sc- 1st Year Fees

Rating:7.5 / 10

#19

Sri Venkateswara University, Directorate of Distance
Education

Tirupati, Andhra Pradesh |UGC, DEB Approved

₹ 15,000- M.Sc- 1st Year Fees

Rating:7.6 / 10

#20

Bharathidasan University, Centre for Distance Education -
[BUCDE]

Tiruchirappalli, Tamil Nadu |UGC, DEB Approved

₹ 10,500- M.Sc- 1st Year Fees

Rating: 8.2 / 10