



Yashwantrao Chavan Maharashtra Open University  
Dnyangangotri near Gangapur Dam, Nashik, Pin Code-422222, Maharashtra(India)

## **Programme Structure Scheme**

**For**

**Post Graduate,  
2 Year(s) Master Degree Program in**

**School of Sciences**

**Master of Science in Botany(V156 - M.Sc. in Botany)**  
(Credits System)

**(2023 Pattern - NEP-Open and Distance Learning)**  
Programme Code: V156

### Publisher's Note

This Yashwantrao Chavan Maharashtra Open University has great Pleasure in publishing this programme structure for Post Graduate programme for 2 Year(s) Master Degree Program as "Master of Science in Botany" (2023 Pattern - NEP - Open and Distance Learning) under the School of "School of Sciences".

On behalf of the University, I thank experts and authorities of the University for the interest taken and the whole hearted co-operation extended by them in bringing out this publication.

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Yashwantrao Chavan Maharashtra Open  
University, Dnyangangotri near Gangapur Dam,  
Nashik, Pin Code-422222, Maharashtra(India)

Registrar

### Programme Objective(s)

1. This programme has the following broad objectives:

- Inculcate critical thinking and analytical skills to enable students to pursue higher studies and research in Life Sciences or related fields of Botany.
- Provide a strong foundation for a better understanding of current advances in Botany and its practical significance.
- Expose students to current trends in research about Botany.
- Gain comprehensive overview about the various courses included in the programme.
- To provide students with a comprehensive understanding of the principles of botany.
- To develop students' research skills in botany.
- To prepare students for careers in botany, research, or related fields.

### Programme Outcome

After successful completion of this programme, students will be able to

- Define the terms "botany", "plant", and "plant science" and explain their relationship to each other.
- Understand the basic principles of plant anatomy, physiology, and ecology.
- Conduct research in botany using a variety of methods.
- Communicate effectively about botany through written reports, presentations, and other media.
- Apply the principles of botany to solve real-world problems.

### The Master of Science in Botany Consists of following 2 programme part(s):

Sr.No.	Programme Part Name	Programme Part Abbreviation	Examination Pattern
1	Year-1	Year-1	Semester
2	Year-2	Year-2	Semester

### The Master of Science in Botany is available in following medium of instruction/s:

1. English

**Programme Part: Year-1** Separate Passing Head: No, Min: 0, Max: 1100, Total Credits: 44.00

**Term: Semester I** Separate Passing Head: No, Min Courses: 6, Max Courses: 6, Min:0,Max:550, Total Credits: 22.00

**The courses for Year-1 - Semester I are classified into following groups:**

**1.Major Elective** (Min Courses: 1, Max Courses: 1,  
Separate Passing Head: No, Max. Marks: 100)

Select minimum 1 course(s)

Select maximum 1 course(s)

Courses:

BOT506	Applied Phycology
BOT507	Tools and Techniques in Plant Science

**2.Major Mandatory** (Min Courses: 4, Max Courses: 4,  
Separate Passing Head: No, Max. Marks: 350)

Select minimum 4 course(s)

Select maximum 4 course(s)

Courses:

BOT501	Diversity of Non-Vascular Plants-I
BOT502	Diversity of Non-Vascular Plants-II
BOT503	Diversity of Vascular Plants & Paleobotany -I
BOT504	Lab Activities on BOT501, BOT502 & BOT503

**3.Research Methodology** (Min Courses: 1, Max Courses: 1,  
Separate Passing Head: No, Max. Marks: 100)

Select minimum 1 course(s)

Select maximum 1 course(s)

Courses:

RES505	Research Methodology
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**Term: Semester II** Separate Passing Head: No, Min Courses: 6, Max Courses: 6, Min:0,Max:550, Total Credits: 22.00

**The courses for Year-1 - Semester II are classified into following groups:**

**1.Major Elective** (Min Courses: 1, Max Courses: 1,  
Separate Passing Head: No, Max. Marks: 100)

Select minimum 1 course(s)

Select maximum 1 course(s)

Courses:

BOT515	Biotechnology and Molecular Biology
BOT516	Ecology and Phytogeography

**2.Major Mandatory** (Min Courses: 4, Max Courses: 4,  
Separate Passing Head: No, Max. Marks: 350)

Select minimum 4 course(s)

Select maximum 4 course(s)

Courses:

BOT509	Plant Physiology
BOT510	Herbal Wealth
BOT511	Diversity of Vascular Plants & Paleobotany-II
BOT512	Lab Activities on BOT509, BOT510 & BOT511

**3.OJT & FP Elective** (Min Courses: 1, Max Courses: 1,  
Separate Passing Head: No, Max. Marks: 100)

Select minimum 1 course(s)

Select maximum 1 course(s)

Courses:

BOT513	On Job Training
BOT514	Field Project

**Programme Part: Year-2** Separate Passing Head: No, Min: 0, Max: 1100, Total Credits: 44.00

**Term: Semester III** Separate Passing Head: No, Min Courses: 6, Max Courses: 6, Min:0,Max:550, Total Credits: 22.00

**The courses for Year-2 - Semester III are classified into following groups:**

**1. Major Elective** (Min Courses: 1, Max Courses: 1,  
Separate Passing Head: No, Max. Marks: 100)  
Select minimum 1 course(s)  
Select maximum 1 course(s)

Courses:

BOT606	Biostatistics
BOT607	Mycology and Plant Pathology
BOT608	Renewable Energy Studies

**2. Major Mandatory** (Min Courses: 4, Max Courses: 4,  
Separate Passing Head: No, Max. Marks: 350)  
Select minimum 4 course(s)  
Select maximum 4 course(s)

Courses:

BOT601	Cytogenetics and Plant Breeding
BOT602	Advanced Plant Physiology
BOT603	Pharmacognosy
BOT604	Lab Activities on BOT601, BOT602 & BOT603

**3. Research Project** (Min Courses: 1, Max Courses: 1,  
Separate Passing Head: No, Max. Marks: 100)  
Select minimum 1 course(s)  
Select maximum 1 course(s)

Courses:

BOT605	Research Project
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**Term: Semester IV** Separate Passing Head: No, Min Courses: 5, Max Courses: 5, Min:0,Max:550, Total Credits: 22.00

**The courses for Year-2 - Semester IV are classified into following groups:**

**1. Major Elective** (Min Courses: 1, Max Courses: 1,  
Separate Passing Head: No, Max. Marks: 100)  
Select minimum 1 course(s)  
Select maximum 1 course(s)

Courses:

BOT613	Anatomy and Embryology
BOT614	Hydroponic Technology
BOT615	Medicinal Plants and their Applications

**2. Major Mandatory** (Min Courses: 3, Max Courses: 3,  
Separate Passing Head: No, Max. Marks: 300)  
Select minimum 3 course(s)  
Select maximum 3 course(s)

Courses:

BOT609	Taxonomy of Angiosperms
BOT610	Seed Technology
BOT611	Lab Activities on BOT609 & BOT610

**3. Reserch Project** (Min Courses: 1, Max Courses: 1,  
Separate Passing Head: No, Max. Marks: 150)  
Select minimum 1 course(s)  
Select maximum 1 course(s)

Courses:

BOT612	Research Project
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