



Deccan Education Society's  
**Fergusson College**

Pune - 411 004, Maharashtra State, INDIA

An Autonomous College (under Savitribai Phule Pune University, Pune)

(D No. PU/PN/AS/182 / 1816) NAAC Accredited "B" Grade (CGPA) 3.52

College with Provision for Excellence (BOE) | BSI BIST Supported College | BBTISIRI College | Heritage Status by UGC



**Deccan Education Society's  
Fergusson College, Pune  
Department of Botany  
M. Sc. (Botany)**



## CURRICULUM

This is a full time two years degree course.

The basic aim of this course is

- To improve understanding of basics of classic botany as well as advances in Plant Biotechnology.
- To provide hands on training to students with the help of revised practicals of biotechnology e.g. RT PCR, transformation, southern & western hybridization, etc.
- To create interest in the students about the field of research.
- To prepare students to step up in the career of pure sciences.
- To create scientific temper and research attitude in students

## COURSES

Master's degree in Botany is of 100 credits. Every student has to complete 100 credits in a minimum of four semesters. M.Sc. Botany course for the college is designed by BOS in Botany. In addition to this there are 10 additional compulsory credits prescribed by SPPU.

### PRESCRIBED COURSE (100 credits)

#### SEMESTER I (25 credits)

**BOT4101** Classic Botany I,  
**BOT4102** Plant Physiology and Biochemistry,

**BOT4103** Genetics and Plant Breeding,

**BOT4104** Botanical Techniques, Practical **BOT4105** (based on BOT4101 and BOT4104),

Practical **BOT4106** (based on BOT4102 and BOT4103),

**BOT4107** Field research work.

#### SEMESTER II (25 credits)

**BOT4201** Classic Botany II,

**BOT4202** Cell Biology,

**BOT4203** Molecular Biology & Genetic Engineering,

**BOT4204** Plant Ecology and Phytogeography,

**BOT4205** Practical (based on BOT4201 and BOT4204),

**BOT4206** Practical (based on BOT4202 and BOT4203),

**BOT4207** Recent trends in Plant Sciences.

#### SEMESTER III (25 credits)

**BOT5301** Angiosperms and Evolution,

**BOT5302** Developmental and Economic Botany,

**BOT5303** Advanced Plant Biotechnology,

**BOT5304** Industrial Botany I (Elective course),

**BOT5305** Industrial Botany II (Elective course),

**BOT5306** Industrial Botany III (Elective course),

**BOT5307** Practical (based on BOT5301, BOT5302, BOT5304, BOT5305, BOT5306),

**BOT5308** Practical (based on BOT5303),

**BOT5309** Summer training.

#### SEMESTER IV (25 credits)

**BOT5401** Biostatistics and Bioinformatics,

**BOT5402** Plant Interactions and Immunology,

**BOT5403** Plant Pathology,

**BOT5404** Industrial Botany IV (Elective course),

**BOT5405** Industrial Botany V (Elective course),

**BOT5406** Industrial Botany VI (Elective course),

**BOT5407** Project,

**BOT5408** Techno-commercial case study.

**ADDITIONAL  
COMPULSORY COURSE (10  
credits)**

Introduction to Cyber Security/  
Information Security. (4credits)

Human Rights (2 Credits)

Skill Development (4 Credits)

The skill development course is

**“Introduction to applications of  
Plant Biotechnology”** which  
includes 4 credits as:

1. Plant growth promoting  
bacteria and fungi
2. Post harvest technology and  
food processing
3. Micropropagation Course
4. Commercial Cultivation and  
processing of Medicinal and  
Aromatic Plants

**PLACEMENTS**

As a part of preplacement activity  
and continuous internal  
assessment, students are equipped  
with the different skills before  
actual placement activity. This  
includes:

- Seminars
- Presentations
- Group discussions
- Extended activities
- Quiz contests
- Demonstrations
- Submissions
- Review & Report writing

Students experience improvement  
in their communication &

presentation skills while  
completing the course.

We try to improve students’  
understanding of the recent  
advances in the field of botany by  
arranging lecture series and  
workshops.

**RECRUITERS**

Our recruiters are Research  
institutes, educational institutes  
and agro based industries and  
companies like:

- ARI, Pune
- VSI, Pune
- KF Bioplants
- NCL, Pune
- Several NGO’s
- Plant tissue culture labs
- Nurseries and hi-tech labs.
- Plant breeding and seed  
supplying companies

**CONTACT**

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**Admission is available by  
entrance examination only**