



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/182/1916) NAAC Accredited 'B' Grade (52993.82)

College with Potential for Excellence (BQI) | 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**