



## FERGUSSON COLLEGE, PUNE

**D.E. Society's  
Fergusson College, Pune**

**POST GRADUATE CENTRE  
IN  
PHYSICS**



**MAIN BUILDING**



### **CONTACTS:**

Dr. Dipak D. Choughule  
Head, Department of Physics,  
physicshod.fergussoncollege@gmail.com  
Phone Number:  
+91 20 3086 6055/56

Dr. Kishor M. Sonawane  
Phone Number:  
+91 20 3086 6060

Dr. Nandkumar Mandlik  
Phone Number:  
+91 20 3086 6064

**Department of Physics  
INFORMATION BROCHURE**

**YEAR 2016-17**

## DEPARTMENT HISTORY:

The department of Physics is the largest and oldest department in Fergusson College as per the number of teaching faculty members and students. It was founded in 1903 and the Post Graduation centre was established in 1969.

## CURRICULUM:

M.Sc. in Physics is a Two Year Post Graduate course, affiliated to the Savitribai Phule Pune University, with Grantable and Non-Grant divisions. The course has been designed according to the Choice Based Credit System (CBCS). This enables our students to develop a strong base in applied and experimental Physics. Our department offers all core courses alongwith the Elective Courses such as: Physics of Thin Films, Physics of Nanomaterials, Astronomy & Astrophysics.

Apart from PG courses we are also a recognized Research Center in Physics with recognized research guides. The department has many ongoing projects funded by BCUD, ISRO, BRNS, DST, UGC, funding agencies. At present department is having various research projects worth Rs. 68 lacs.

<b>Course Name</b>	M.Sc. in Physics
<b>Course Type &amp; Intake Capacity</b>	Grantable: 30 Non-Grantable: 24
<b>Eligibility</b>	B.Sc. Physics
<b>Duration</b>	4 - Semesters (2 Years)
<b>Selection Process</b>	As per Merit

## Salient Features of Credit System:

**P.G. Course in Physics is of 100 credits.**

**Semester I ( 25 Credits ) :** Classical Mechanics, Mathematical Methods in Physics, Atoms and Molecules, Electronics, Physics laboratory I, Physics laboratory II, Extra Credit (1 Credit).

**Semester II (25 Credits):** Electrodynamics, Solid State Physics, Quantum Mechanics, Statistical Mechanics, Physics Laboratory III, Physics Laboratory IV, Extra Credit (1 Credit).

**Semester III (25 credits):** Physics of Semiconductor Devices, Experimental Techniques in Physics, Physics of Thin Film, Astronomy and Astrophysics I, Physics Laboratory V, Physics Laboratory VI, Extra Credit (1 Credit).

**Semester IV (25 credits):** Nuclear Physics, Materials Science, Physics of Nanomaterials, Astronomy and Astrophysics II, Physics Laboratory VII, Physics Laboratory VIII, Extra Credit (1 Credit).

## Additional Compulsory Courses

(10 Credits):

### M.Sc. -I

Introduction to Cyber Security I (1-Credit)  
Introduction to Cyber Security II (1-Credit)  
Human Rights I (1-Credit)  
Human Rights II (1-Credit)

### M.Sc. -II

Introduction to Cyber Security III (1Credit)  
Introduction to Cyber Security IV (1Credit)  
Skill Development I (2-Credit)  
Skill Development II (2-Credit)

## Future Opportunities and Prospects:

We guide the students for getting jobs in Academics, Research and Industries by

- Arranging invited talks on cutting edge research areas by renowned scientists.
- Arranging coaching sessions for SET/NET exams.
- Arranging students' visits to Industries and Research Institutes of National level.