

# FIRST-YEAR OF MASTER OF SCIENCE IN PHYSICS REVISED SYLLABUS ACCORDING TO CBCS NEP2020

COURSE TITLE:- ELECTIVE PRACTICAL SEMESTER – I W.E.F. 2023-2024

# RECOMMENDED BY THE BOARD OF STUDIES IN PHYSICS AND APPROVED BY THE ACADEMIC COUNCIL

Devrukh Shikshan Prasarak Mandal's

Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce, and Vid. Dadasaheb Pitre Science College (Autonomous), Devrukh. Tal.Sangmeshwar, Dist. Ratnagiri-415804, Maharashtra, India

# Academic Council Item No: 03 dated 8 July 2023

Commerce, and Vid. Dadasaheb Pitre Science College (Autonomous), Devrukh. Tal. Sangmeshwar, Dist. Ratnagiri-415804,
Sangmeshwar, Dist. Ratnagiri-415804,
University of Mumbai
Master of Science
Physics
First Year
First
02
Elective Practical-I
S506PHP
Elective-I
BSc in Physics
40%
Summative at the end of semester
PG
100 %
NEP-CBCS
2023-2024

# **Syllabus for First Year of Master of Science in Physics**

(With effect from the academic year 2023-2024)

SEMESTER - I Paper No-Practical

Course Title: Elective Practical-I No. of Credits - 02

Type of Vertical: Elective COURSE CODE: S506PHP

### **Learning Outcomes Based on BLOOM's Taxonomy:**

After completing the course, the learner will be able to			
Course Learning Outcome No.	Blooms Taxonomy	Course Learning Outcome	
CLO-01	Remember	Memorize the theory related to the experiments in the course	
CLO-02	Understand	Understand the main principle in each of the experiments	
CLO-03	Apply	Interpret the results of the experiments	
CLO-04	Analyze	Explain various parameters involved in the experiments	

## Syllabus for First Year of Master of Science in Physics

(With effect from the academic year 2023-2024)

SEMESTER-I Paper No-Practical

Course Title: Elective Practical-I No. of Credits - 02

Type of Vertical: Elective COURSE CODE: S506PHP

#### **COURSE CONTENT**

#### **List of Practicals**

- 1. Voltage regulator IC
- 2. Regulated dual power supply using IC regulators
- 3. Analysis of sodium spectrum
- 4. Susceptibility measurement by Quincke's method /Guoy's balance method
- 5. Study of 4 digit multiplex display system
- 6. Temperature dependence of avalanche and Zener breakdown diodes
- 7. DC Hall effect
- 8. Michelson Interferometer
- 9. Absorption spectrum of specific liquids
- 10. Magneto resistance of Bi specimen

#### **Access to the Course**

The course is available for all the students admitted for Master of science with Physics.

#### **Methods of Assessment**

Vocational Skill Courses, Skill Enhancement Courses and the courses having laboratory sessions shall be assessed at the end of each semester.