

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

Name of the Implementing	:	Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre
Institute		Commerce, and Vid. Dadasaheb Pitre Science
		College (Autonomous), Devrukh. Tal.
		Sangmeshwar, Dist. Ratnagiri-415804,
Name of the Parent University	:	University of Mumbai
Name of the Programme	:	Master of Science
Name of the Department	:	Physics
Name of the Class	:	First Year
Semester	:	First
No. of Credits	:	02
Title of the Course	:	Elective Practical-I
Course Code	:	S506PHP
Name of the Vertical in adherence	:	Elective-I
to NEP 2020		
Eligibility for Admission	:	BSc in Physics
Passing Marks	:	40%
Mode of Assessment	:	Summative at the end of semester
Level	:	PG
Pattern of Marks Distribution for	:	100 %
SEE		
Status	:	NEP-CBCS
To be implemented from Academic	:	2023-2024
Year		

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.