

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

### COURSE TITLE:-MAJOR PRACTICAL SEMESTER – II 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

Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce and Vid. Dadasaheb Pitre Science College, Devrukh (An Autonomous College Affiliated with University of Mumbai)

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	:	Second
No. of Credits	:	02
Title of the Course	:	Major Practical-I
Course Code	:	S513PHP
Name of the Vertical in adherence	:	Major
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		
Ordinances /Regulations (if any)		

### Academic Council Item No: 03 dated 8 July 2023

Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce and Vid. Dadasaheb Pitre Science College, Devrukh (An Autonomous College Affiliated with University of Mumbai)

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

### (With effect from the academic year 2023-2024)

### **SEMESTER-II**

Paper No–Practical–I No. of Credits - 04

**COURSE CODE: S513PHP** 

**Course Title: Major Practical-I** 

Type of Vertical: Major

## 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	Recall the concepts behind the experiments in this course	
CLO-02	Apply	Demonstrate any of the experiments in the course	
CLO-03	Analyze	Manipulate the parameters of the experiments based on minor variations	

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# Syllabus for First Year of Master of Science in Physics (With effect from the academic year 2023-2024)

### SEMESTER-II

### **Course Title: Major Practical-I**

Type of Vertical: Major

Paper No–Practical - I No. of Credits - 04 COURSE CODE: S513PHP

# COURSE CONTENT

### **List of Practicals**

- 1. Measurements in Refractive Index of Liquids using Laser
- 2. Double slit-Fraunhofer diffraction (missing order etc.)
- 3. Adder-subtractor circuits using ICs
- 4. Study of Presettable counters-74190 and 74193
- 5. Shift registers
- 6. Study of 8085 microprocessor Kit and execution of simple Programmes
- 7. Waveform generation using 8085
- 8. SID& SOD using 8085

#### 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.

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