



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

**COURSE TITLE:- ELECTIVE PRACTICAL-II
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 Institute	:	Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre 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 -II
Course Code	:	S508PHP
Name of the Vertical in adherence to NEP 2020	:	Elective-II
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 SEE	:	100 %
Status	:	NEP-CBCS
To be implemented from Academic Year	:	2023-2024

Syllabus for First Year of Master of Science in Physics

(With effect from the academic year 2023-2024)

SEMESTER – I

Course Title: ELECTIVE PRACTICAL

No. of Credits - 02

Type of Vertical: Elective-II

COURSE CODE: S508PHP

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

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SEMESTER - I

Course Title: ELECTIVE PRACTICAL-II

No. of Credits - 02

Type of Vertical: Elective-II

COURSE CODE: S508PHP

COURSE CONTENT

List of Practicals

1. Determination of particle size of lycopodium particles by laser diffraction method
2. Resistivity by four probe method
3. Microwave oscillator characteristics
4. Temperature on-off controller using IC
5. Waveform Generator using ICs
6. Instrumentation amplifier and its applications
7. Study of 8 bit DAC
8. 16 channel digital multiplexer
9. Study of elementary digital voltmeter

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.