

**MASTER OF SCIENCE - PHYSICS****(As Per NEP-2020)****SEM - I****Major Subjects (Mandatory)**

- 1) Semiconductor Physics and Devices
- 2) Electrodynamics
- 3) Mathematical Physics

**Major Elective (Any One)**

- 1) **Complex Analysis and Numerical**
- 2) Methods Astrophysics
- 3) Energy Physics
- 4) Introduction to Python
- 5) Biophysics

**Practical**

- 1) Based On Core

**Compulsory Paper (RM)**

- 1) Research Methodology

**SEM - II****Major Subjects (Mandatory)**

- 1) Fundamentals of Quantum Mechanics
- 2) Solid State Physics
- 3) Classical and Statistical Mechanics

**Major Elective (Any One)**

- 1) **Practical Electronics**
- 2) Advanced Optoelectronics
- 3) Plasma Physics and Space Science
- 4) Medical Physics
- 5) Data Science\*Industrial Training(OJT)/

**Practical**

- 1) Based On Core

**Compulsory Paper (RM)**

- 1) Field Project/Research Project

**MASTER OF SCIENCE - PHYSICS****SEM - III****Major Subjects (Mandatory)**

- 1) Nuclear and Particle Physics
- 2) Advanced Condensed Matter Physics
- 3) Atomic and Molecular Physics

**Major Elective (Any One)**

- 1) **Fundamentals of Nanoscience & Nanotechnology**
- 2) Optical Fibre and Sensors
- 3) Defects in Solids
- 4) Digital Electronics and Microprocessors
- 5) Ultrasonic and its Applications

**Practical**

- 1) Based On Core

**Compulsory Paper (RM)**

- 1) \*RP (Research Project)

**SEM - IV****Major Subjects (Mandatory)**

- 1) Advanced Quantum Mechanics
- 2) Physics of LASER & its Applications
- 3) Advanced Atomic & Molecular Physics

**Major Elective (Any One)**

- 1) **Optics and Optical Instruments**
- 2) Acoustics
- 3) Solar and Photovoltaics
- 4) Material Synthesis and Characterization
- 5) X-ray Emission and Absorption Spectroscopy

**Practical**

- 1) Based On Core

**Compulsory Paper (RM)**

- 1) \*RP (Research Project)

टिप :- सत्र २०२४-२५ ला NEP 2020 नुसार प्रवेश प्रक्रिया होणार असल्यामुळे अभ्यासक्रमातील विषय बदलची माहिती प्रवेश घेतांना प्रवेश समितीकडून आपणास कळविण्यात येईल.