

# **BSc Physics Honours Syllabus PDF**

The BSc Physics Honours subjects are assigned based on current BSc Physics Honours career trends and recruiter criteria. The table below illustrates the courses covered in the BSc Physics Honours syllabus, which gives a foundational grasp of ideas as well as a deeper comprehension of BSc Physics Honours subjects and other components.

#### **First Year**

Semester I	Semester II
Communication Skills-I	Communication Skills-II
Generic Elective 1	Electricity And Magnetism
Generic Elective 1	Thermal Physics
Mathematical Physics-I	Electricity And Magnetism Laboratory
Mathematical Physics-I Laboratory	Environmental Studies
Mechanics	Generic Elective 2
-	Thermal Physics Laboratory

## **Second Year**

Semester III	Semester IV
Generic Elective 3	Elements Of Modern Physics
Mathematical Physics-II	Elements Of Modern Physics Laboratory
Mathematical Physics-II Laboratory	Generic Elective 4
Pathway Elective 1	Mathematical Physics-III
Waves And Optics	Mathematical Physics-III Laboratory



Digital Systems And Applications	Analog Systems And Applications
Digital Systems And Applications Laboratory	Analog Systems And Applications Laboratory
Waves And Optics Laboratory	Pathway Elective 2

## **Third Year**

Semester V	Semester VI
Department Elective 1	Department Elective 3
Quantum Mechanics Laboratory	Internship
Solid State Physics	Pathway Elective 4
Solid State Physics Laboratory	Statistical Mechanics
Department Elective 2	Department Elective 3 Lab
Department Elective 2 Lab	Department Elective 4
Pathway Elective 3	Electromagnetic Theory
Quantum Mechanics And Applications	Electromagnetic Theory Laboratory

## **BSc Physics Honours Subjects**

Subjects in BSc Physics Honours are classified into the core and elective subjects, respectively. Students can choose elective subjects based on their interests, career choices, or future goals.

## **Core Subjects**

- Mathematical Physics-I
- Elements of Modern Physics
- Mechanics
- Electricity and Magnetism
- Waves and Optics



• Thermal Physics

## **Elective Subjects**

- Advanced Mathematical Physics I
- Advanced Dynamics
- Communication Electronics
- Astronomy and
- Astrophysics
- Nuclear and Particle Physics
- Advanced Mathematical Physics II

## **Projects**

- Understanding the impact of Projectiles
- The Physics of levitation
- Double Pendulum and its Application
- Study on the effect of solar power
- Making and studying high-TC superconductors