

**4-YEAR UNDERGRADUATE PROGRAM
(FYUGP-2024)**

with

Single Major Single Minor

**UNDER THE NEW CURRICULUM AND
CREDIT FRAMEWORK, 2022**

UNDERGRADUATE PHYSICS SYLLABUS

**University of North Bengal
2024**

COURSE STRUCTURE
Major Discipline: Physics

Semester	Paper	Title	Type
I	UPHYMAJ-1	Mathematical Physics I	Theory + Practical
	UPHYMAJ-2	Mechanics	Theory + Practical
II	UPHYMAJ-3	Electricity and Magnetism	Theory + Practical
	UPHYMAJ-4	Waves and Optics	Theory + Practical
III	UPHYMAJ-5	Mathematical Physics II	Theory + Practical
	UPHYMAJ-6	Thermal Physics	Theory + Practical
IV	UPHYMAJ-7	Quantum Mechanics	Theory + Practical
	UPHYMAJ-8	Classical Mechanics I	Theory + Tutorial
V	UPHYMAJ-9	Analog Electronics	Theory + Practical
	UPHYMAJ-10	Mathematical Physics III	Theory + Practical
	UPHYMAJ-11	Atomic Physics	Theory + Tutorial
	UPHYMAJ-12	Solid State Physics	Theory + Practical
VI	UPHYMAJ-13	Electromagnetic Theory	Theory + Practical
	UPHYMAJ-14	Statistical Mechanics	Theory + Tutorial
	UPHYMAJ-15	Digital Electronics	Theory + Practical
	UPHYMAJ-16	Nuclear and Particle Physics	Theory + Tutorial

COURSE STRUCTURE
Minor Discipline: Physics

Semester	Paper	Title	Type
I	UPHYMIN-1	Mechanics	Theory + Practical
II	UPHYMIN-2	Electricity and Magnetism	Theory + Practical
III	UPHYMIN-3	Waves and Optics	Theory + Practical
IV	UPHYMIN-4	Thermal Physics	Theory + Practical
V	UPHYMIN-5	Electronics	Theory + Practical
VI	UPHYMIN-6	Quantum Mechanics	Theory + Tutorial

**4-YEAR UNDERGRADUATE PROGRAM
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with

Three Discipline Specific Multidisciplinary Course

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UNDERGRADUATE PHYSICS SYLLABUS

**University of North Bengal
2024**

COURSE STRUCTURE

DSC-Major in Physics

Semester	Paper	Title	Type
I	DSCPHYMAJ-1	Mechanics	Theory + Practical
II	DSCPHYMAJ-2	Electricity & Magnetism	Theory + Practical
III	DSCPHYMAJ-3	Waves & Optics	Theory + Practical
IV	DSCPHYMAJ-4	Thermal Physics	Theory + Practical
V	DSCPHYMAJ-5	Electronics	Theory + Practical
	DSCPHYMAJ-6	Quantum Mechanics	Theory + Tutorial
VI	DSCPHYMAJ-7	Solid State Physics	Theory + Tutorial
	DSCPHYMAJ-8	Nuclear Physics	Theory + Tutorial

DSC-Minor in Physics

Semester	Paper	Title	Type
I	DSCPHYMIN-1	Mechanics	Theory + Practical
II	DSCPHYMIN-2	Electricity & Magnetism	Theory + Practical
III	DSCPHYMIN-3	Waves & Optics	Theory + Practical
IV	DSCPHYMIN-4	Thermal Physics	Theory + Practical
V	DSCPHYMIN-5	Electronics	Theory + Practical
VI	DSCPHYMIN-6	Quantum Mechanics	Theory + Tutorial

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**UNDER THE NEW CURRICULUM AND
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Syllabus of
**INTER-DISCIPLINARY COURSE (IDC)
&
SKILL ENHANCEMENT COURSE (SEC)**
in
PHYSICS

University of North Bengal
2024

Inter-Disciplinary Courses in Physics

Semester	Paper	Title	Type
III	PHYIDC-1	Physics in Daily Life	Theory
IV	PHYIDC-2	Introduction to Basic Astronomy	Theory

Skill Enhancement Courses in Physics

Semester	Paper	Title	Type
II	PHYSEC-1	Typesetting in Latex	Theory + Practical