

PG Department of Physics
St. Xavier's College, Thumba
FYUGP in Physics - Course basket

Stream - **Science**

Subject - **Physics**

Discipline Specific Core/Elective Courses

Semester	Category	Course
1	DSC	FOUNDATION COURSE IN PHYSICS - I
	DSC	PRINCIPLES OF DYNAMICS
	DSC	PROPERTIES OF SOLIDS
2	DSC	FOUNDATION COURSE IN PHYSICS - II
	DSC	ELECTRICITY, MAGNETISM AND ACOUSTICS
	DSC	OPTICS AND THERMODYNAMICS
3	DSC	BASIC ELECTRONICS
	DSC	SOLID STATE PHYSICS AND SPECTROSCOPY
	DSC	LIGHT, ELECTRICITY AND EMERGING ENERGY SOURCES
	DSE	BASICS OF NANOSCIENCE AND NANOTECHNOLOGY (Specialisation)
4	DSC	CLASSICAL DYNAMICS
	DSC	ELECTROMAGNETICS AND TRANSIENT CURRENTS
	DSE	SYNTHESIS OF NANOMATERIALS (Specialisation)
	DSE	C++ PROGRAMMING FOR PHYSICS
5	DSC	OPTICS
	DSC	QUANTUM MECHANICS - I
	DSC	THERMODYNAMICS & STATISTICAL MECHANICS
	DSE	CHARACTERIZATION OF NANOMATERIALS (Specialisation)
	DSE	RESEARCH METHODOLOGY
6	DSC	ATOMIC & MOLECULAR PHYSICS
	DSC	NUCLEAR & PARTICLE PHYSICS

	DSC	SOLID STATE PHYSICS
	DSE	NANOTECHNOLOGY FOR ENERGY CONVERSION AND STORAGE DEVICES (Specialisation)
	DSE	OPERATIONAL AMPLIFIERS AND APPLICATIONS
7	DSC	ADVANCED MATHEMATICAL PHYSICS
	DSC	QUANTUM MECHANICS - II
	DSE	ENVIRONMENTAL SUSTAINABILITY OF NANOMATERIALS (Specialisation)

General Foundation Courses

Semester	Category	Course
1	MDC	PHYSICS OF EVERYDAY APPLIANCES
2	MDC	BASICS OF ARTIFICIAL INTELLIGENCE
	MDC	BEYOND THE SKY
4	VAC	DISASTER MANAGEMENT

Internship/Projects

Semester	Course
4	Internship
8	Capstone internship project in Honours
	Research project in Honours