

## Department of Physics Course Outcomes

Sl.No.	Semester	Course Code	Course Title		Course Outcomes(COs)
			<b>Mechanics &amp; Properties of Matter</b>	CO1	The students should have attained a common level in basic mechanics, a secure foundation in mathematics.
				CO2	This course would empower the student to acquire engineering skills and practical knowledge, which help the student.
				CO3	This course will provide a theoretical basis for doing experiments in related areas.
				CO4	This course will provide a basic knowledge & information about space rockets.
				CO5	This course will provide knowledge of the acrobatics.
				CO6	This course will provide the knowledge of the SONAR System.
			<b>Waves &amp; Oscillations</b>	CO1	The students should have attained a common level in basics of waves and oscillations, a secure foundation in mathematics.
				CO2	This course would empower the student to acquire practical knowledge, which helps the student in their everyday life.
				CO3	This course will provide knowledge on the vibrating musical instruments.
				CO4	This course will provide Knowledge on the working of medical laboratory instruments.
				CO5	This course will provide knowledge on the applications of ultrasonics.
			<b>WAVE OPTICS</b>	CO1	1. The students should have attained a common level in basics of Light.
				CO2	2. This course will provide knowledge on the Powerful tools for tackling a wide range of topics in Optics, Laser, Fiber optics.
				CO3	3. This course will provide knowledge on the applications of Lasers and Optical fibres.
				CO4	4. This course will provide knowledge on very important and fascinating areas of interference diffraction and polarization with many experiments associated with it.
				CO5	5. This course will provide knowledge on the communicating system using fiber optics.
			<b>Thermodynamics &amp; Radiation Physics</b>	CO1	1. The students should have attained a common level in basics of Thermodynamics.
				CO2	2. This course will provide knowledge on the Thermometers.
				CO3	3. This course will provide knowledge on the refrigeration.
				CO4	4. This course will provide knowledge on the pyrometers.
				CO5	5. This course will provide Knowledge on Temperature of the sun.
				CO6	6. This course will provide knowledge on Mechanical Engines.
			<b>Electricity, Magnetism and Electronics</b>	CO1	1. The students should have attained a common level in basics of Electronics, Electricity and Magnetism.
				CO2	2. The Students should familiarise with electrical circuits, electrical connections, and storage devices their working etc.
				CO3	3. The theoretical and practical knowledge about signal generating circuits enable the students to identify different communication techniques.
				CO4	4. The Students will familiarise with logic circuits and their applications which enables them to design logic circuits of their own.
				CO1	1. The students should have attained a common level in basics of properties of particles.

Sl.No.	Semester	Course Code	Course Title		Course Outcomes(COs)
			Modern Physics	CO2	2. The Students should familiarise with different radioactive devices.
				CO3	3. The student have knowledge about bio medical instruments like X-ray, CT scan, MRI etc.,
				CO4	5. The Students get knowledge on Crystallography.
				CO5	6. This course would empower the student to acquire practical knowledge, which helps the student in their everyday life.
			Analog and Digital Electronics	CO1	1. Design & Analyse the JFET & MOSFET, Motor speed controller.
				CO2	2. Learn basic functions of Op-amp.
				CO3	3. Student will gain knowledge about multiplexers, counters etc., and the data is arranged in a meaningful manner i.e., information i.e., Computers.
				CO4	4. It can be used as operative device for TV.
				CO5	5. It can be used as smart lighting control systems.
			Introduction to Microprocessors and Microcontrollers	CO1	To learn about the Intel 8085 Microprocessor Block diagram – central processing unit CPU – arithmetic and logic unit ALU and they can understand the concepts of address, data and control buses in the digital systems. Stack and subroutines. Students can learn about various Interrupts – hardware and software interrupts.
				CO2	To learn about the instructions of 8085 microprocessor. Assembly language programming using 8085 microprocessor.
				CO3	To learn about the basics of serial communication, Interfacing 8051 to RS232, serial communication programming and modes & protocols.
				CO4	To learn about interfacing LCD, ADC, temperature sensor and other sensors with 8051. To learn about interfacing keyboard, stepper motor, DAC to 8051.
				CO5	
			Computational Methods and Programming	CO1	1. Given a computational problem, identify and abstract the programming task involved.
				CO2	2. Approach the programming tasks using techniques learned and write pseudo-code.
				CO3	3. Choose the right data representation formats based on the requirements of the problem.
				CO4	4. Write the program on a computer, edit, compile, debug, correct, recompile and run it.
				CO5	5. Apply Numerical analysis which has enormous application in the field of Science.
			Electronic Instrumentation	CO1	Analyze the performance characteristics of each instrument
				CO2	Illustrate basic meters such as voltmeters and ammeters.
				CO3	Explain about different types of signal analyzers.
				CO4	Explain the basic features of oscilloscope and different types of oscilloscopes
				CO5	Apply the complete knowledge of various electronics instruments/transducers to measure the physical quantities in the field of science, engineering and technology.