



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL
URR18 - MINOR IN PHYSICS (MPY) - MINOR CURRICULUM
EQUIVALENT MOOCs – ODD SEMESTER, JULY-DEC 2025, AY 2025-26

The following is the list of Minor Courses in PHYSICS and their equivalent courses for the odd semester (July-December) academic year 2025-26.

			EQUIVALENT COURSES OFFERED BY SWAYAM-NPTEL			
S.No	Course Code	Course Name	<i>Course Name</i>	C	Course Dates*	Course Enrollment Link
1	U18MPY1001	Vibrations and Waves	<i>Waves and Oscillations</i>	3	CCD: 21.07.2025 LDR: 28.07.2025	https://onlinecourses.swayam2.ac.in/aic22_ts08/preview
2	U18MPY1002	Optoelectronics	<i>Applied Optics</i>	2	CCD: 21.07.2025 LDR: 28.07.2025	https://onlinecourses.nptel.ac.in/noc25_ph35/preview
3	U18MPY1003	Optical fiber communication	<i>Fiber optic Communication technology</i>	3	CCD: 21.07.2025 LDR: 28.07.2025	https://onlinecourses.nptel.ac.in/noc25_ee90/preview
MINOR ELECTIVE COURSES (any 3 to 6 courses)						
4	U18MPY1004	Principles of Lasers and their applications	<i>Laser Based Manufacturing</i>	2	CCD: 21.07.2025 LDR: 18.08.2025	https://onlinecourses.nptel.ac.in/noc25_me152/preview
5	U18MPY1005	Nanomaterials	<i>Physics of Nanomaterials</i>	3	CCD: 21.07.2025	https://onlinecourses.nptel.ac.in/noc25_ph30/preview

					LDR: 28.07.2025	
6	U18MPY1006	Applications of Physics: A modern perspective	Physics of Functional Materials and Devices	3	CCD: 21.07.2025 LDR: 28.07.2025	https://onlinecourses.nptel.ac.in/noc25_ee177/preview
7	U18MPY1007	Fundamentals of Electromagnetism	Applied Electromagnetics for Engineers	3	CCD: 21.07.2025 LDR: 28.07.2025	https://onlinecourses.nptel.ac.in/noc25_ee148/preview
8	U18MPY1008	Classical Physics	Classical Mechanics-I (INI)	3	CCD: 21.07.2025 LDR: 28.07.2025	https://onlinecourses.swayam2.ac.in/ini25_ph03/preview
9	U18MPY1009	Solid state physics	Solid state physics	3	CCD: 21.07.2025 LDR: 28.07.2025	https://onlinecourses.nptel.ac.in/noc25_ph52/preview
10	U18MPY1010	Introduction to Nuclear and Particle Physics	Nuclear and Particle Physics (CEC)	3	CCD: 14.07.2025 LDR: 28.07.2025	https://onlinecourses.swayam2.ac.in/cec25_ph01/preview
11	U18MPY1011	Modern materials	Energy Materials and Devices	3	CCD: 21.07.2025 LDR: 28.07.2025	https://onlinecourses.nptel.ac.in/noc25_ph56/preview
12	U18MPY1012	Experimental Physics	Experimental Physics-I	3	CCD: 21.07.2025 LDR: 28.07.2025	https://onlinecourses.nptel.ac.in/noc25_ph51/preview
13	U18MPY1013	Computational physics	NOT AVAILABLE THIS SEMESTER	-	CCD: - LDR: -	-

14	U18MPY1014	Quantum Physics	Advanced Quantum Mechanics with Applications	3	CCD: 21.07.2025 LDR: 28.07.2025	https://onlinecourses.nptel.ac.in/noc25_ph44/preview
15	U18MPY1015	Smart materials	NOT AVAILABLE THIS SEMESTER	-	CCD: - LDR: -	-
16	U18MPY1016	Thermodynamics	Thermodynamics & its applications, IGNOU	3	CCD: 21.07.2025 LDR: 28.07.2025	https://onlinecourses.swayam2.ac.in/nou25_me07/preview
17	U18MPY1017	Mechanics	Mechanics	3	CCD: 21.07.2025 LDR: 28.07.2025	https://onlinecourses.nptel.ac.in/noc25_me184/preview
18	U18MPY1018	Oscillations	NOT AVAILABLE THIS SEMESTER	-	CCD: - LDR: -	-

*C: Credits ; CCD: Course Commencement Date; LDR: Last Date of Registration

-	Minor Laboratory Courses	Laboratory Courses (any 2 courses) – TO BE TAKEN IN THE MINOR DEPARTMENT			
19		U18MPY1019	Applied Optics Laboratory		2
20		U18MPY1020	Oscillations and waves laboratory		
21		U18MPY1021	Electricity & Magnetism laboratory		
		U18MPY1022	Modern Physics Laboratory		
Total Credits to be earned					18+2

Sd/-

Dr. K. Rajendra Prasad
MOOCs Coordinator

Date: 04.07.2025

Sd/-

Dr. H. Ramesh Babu
Head of the Department

Dean, Academic Affairs