



KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE, WARANGAL
MINOR IN PHYSICS (MPY) - MINOR CURRICULUM
EQUIVALENT MOOCs - ODD SEMESTER, JULY-DEC 2021, AY 2021-22

S.No	Course Code	Course Name	EQUIVALENT COURSES OFFERED BY								
			SWAYAM-NPTEL			COURSERA / UDEMY			SPOKEN TUTORIAL - IITB		
MINOR COMPULSORY COURSES			Course Name	C	Course Dates*	Course Name	C	Course Dates*	Course Name	C	Course Dates*
1	U18MPY1001	Vibrations and Waves	Waves and Oscillations	3	CCD: 26.07.2021	--	-	-	--	-	--
					LDR: 02.08.2021			-			-
2	U18MPY1002	Optoelectronics	Introduction to Photonics	3	CCD: 26.07.2021	--	-	-	--	-	-
					LDR: 02.08.2021			-			-
3	U18MPY1003	Optical fiber communication	Fiber Optic Communication Technology	3	CCD: 26.07.2021	--	-	-	--	-	-
					LDR: 02.08.2021			-			-
MINOR ELECTIVE COURSES											
4	U18MPY1004	Principles of Lasers and their applications	--			--	-	-	-	-	-
5	U18MPY1005	Nanomaterials	Nanomaterials and their Properties	3	CCD: 26.07.2021	--	-	--	--	--	--
					LDR: 02.08.2021			--			--
6	U18MPY1006	Applications of Physics: A modern perspective	Solar Photovoltaics Fundamentals, Technology And Applications	2	CCD: 26.07.2021	--	-	--	--	--	--
					LDR: 02.08.2021			--			--

7	U18MPY1007	Fundamentals of Electromagnetism	Applied Electromagnetics For Engineers	3	CCD: 26.07.2021	--	-	-	-	-	-
					LDR: 02.08.2021			-			-
8	U18MPY1008	Classical Physics	Introduction to Classical Mechanics	3	CCD: 26.07.2021	--	-	-	-	-	-
					LDR: 02.08.2021			-			--
9	U18MPY1009	Solid state physics	Solid state physics	2	CCD: 23.08.2021	--	-	-	-	-	-
					LDR: 23.08.2021			-			-
10	U18MPY1010	Introduction to Nuclear and Particle Physics	Nuclear and Particle Physics	3	CCD: 26.07.2021	--	-	-	-	-	-
					LDR: 02.08.2021			-			-
11	U18MPY1011	Modern materials	An Introduction To Materials: Nature And Properties (Part 1: Structure Of Materials)	2	CCD: 26.07.2021	--	-	-	-	-	-
					LDR: 02.08.2021			-			-
12	U18MPY1012	Experimental Physics	Experimental Physics-I	3	CCD: 26.07.2021	--	-	--	--	-	--
					LDR: 02.08.2021			-			-
13	U18MPY1013	Computational physics	Computational physics	3	CCD: 26.07.2021	--	-	-	-	-	-
					LDR: 02.08.2021			-			-
14	U18MPY1014	Quantum Physics	Advanced Quantum Mechanics with Applications	2	CCD: 26.07.2021	--	--	-	--	-	--
					LDR: 02.08.2021			-			--

15	U18MPY1015	Smart materials	Physics of Materials	3	CCD: 26.07.2021	--	-	--	--	-	--
					LDR: 02.08.2021						
16	U18MPY1016	Thermodynamics	Thermodynamics	3	CCD: 26.07.2021	--	-	--	--	-	--
					LDR: 02.08.2021						
17	U18MPY1017	Mechanics	Theoretical Mechanics	3	CCD: 26.07.2021	--	-	--	--	-	--
					LDR: 02.08.2021						
18	U18MPY1018	Oscillations	--	--	--	--	-	--	--	-	--

- I. In exigency situations such as the student already completed the listed compulsory courses(s) on his/her own interest during previous semesters through valid MOOCs etc, the HoD in consultation with Dean-AA shall propose an alternative course(s) for the specific scenario, after verification of relevant documents.
- II. By the end of April of every academic year, the department in consultation with Dean-AA, shall
- notify the list of equivalent courses in SWAYAM-NPTEL MOOCs / other standard MOOCs against the list of courses notified under Honours curriculum
 - propose a new course(s) in the place of any listed course(s) in the Honours curriculum, in case no equivalent course is found in MOOCs

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

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

Sd/-

Dr. K. Rajendra Prasad
MOOCs Coordinator

Date: 19.06.2021

Sd/-

Dr. T. Madhukar Reddy
Head of the Department

Dean, Academic Affairs