

List of SWAYAM courses to be offered in Even semesters (Jan.-Jun 2025)

Sl. No.	Name of the department	Semester	Name of the Course	Course Code (As per SWAYAM)	Course code (As per our university PG ordinance 2022-23 and decided by DC)	Type of Course (As per our university PG ordinance 2022-23) (DBCC/DBCE/OEIC/MENCC)	Credit	Name of the Course Coordinator/Instuctor	Name of the SWAYAM Coordinator of the concerned dept. of CUSB	Host Institute
1	Physics	2	Advanced NMR Techniques in Solution and Solid-State	noc25-ph02	PHY82SW25903		3	Prof. N. Suryaprakash	Vijay Raj Singh	IISc Bangalore
		2	Electronic Theory of Solids	noc25-ph06	PHY82SW26003		3	Prof. Arghya Taraphder	Vijay Raj Singh	IIT Kharagpur
		2	Elements of Modern Physics	noc25-ph07	PHY82SW26103		3	Prof. Saurabh Basu	Vijay Raj Singh	IIT Guwahati
		2	Fluid Dynamics for Astrophysics	noc25-ph09	PHY82SW26203		3	Prof. Prasad Subramanian	Vijay Raj Singh	IISER Pune
		2	Foundations of quantum theory: Relativistic approach	noc25-ph10	PHY82SW26303		3	Prof. Kinjalk Lochan	Vijay Raj Singh	IISER Mohali
		2	Fundamentals of Attosecond Science and Technology (F	noc25-ph11	PHY82SW26403		3	Prof. Sivarama Krishnan	Vijay Raj Singh	IIT Madras
		2	Group Theory methods in Physics	noc25-ph12	PHY82SW26503		3	Prof. P. Ramadevi	Vijay Raj Singh	IIT Bombay
		2	Statistical Mechanics	noc25-ph24	PHY82SW26603		2	Prof. Dipanjan Chakraborty	Vijay Raj Singh	IISER Mohali
		2	Mathematical Methods in Physics 1	noc25-ph15	PHY82SW26703		2	Prof. Auditya Sharma	Vijay Raj Singh	IIT Madras
		2	Nuclear Astrophysics	noc25-ph16	PHY82SW26803		2	Prof. Anil Kumar Gourishetty	Vijay Raj Singh	IIT Roorkee
		2	Particle Physics and the Standard Model	noc25-ph17	PHY82SW26903		3	Prof. Nirmal Raj	Vijay Raj Singh	IISc Bangalore
		2	Physics of Biological Systems	noc25-ph18	PHY82SW27003		3	Prof. Mithun Mitra	Vijay Raj Singh	IIT Bombay
		2	Physics of Linear And Nonlinear Optical Waveguides	noc25-ph19	PHY82SW27103		3	Prof. Samudra Roy	Vijay Raj Singh	IIT Kharagpur
		2	Plasma Physics and Applications	noc25-ph21	PHY82SW27203		3	Prof. M.V. Sunil Krishna	Vijay Raj Singh	IIT Roorkee
		2	Quantum Entanglement: Fundamentals, measures and a	noc25-ph28	PHY82SW27303		3	Prof. Amarendra Kumar Sarma	Vijay Raj Singh	IIT Guwahati
		2	Topology and Condensed Matter Physics	noc25-ph29	PHY82SW27402		2	Prof. Saurabh Basu	Vijay Raj Singh	IIT Guwahati
2	Chemistry	2	Properties of Materials (Nature and Properties of Materia	noc25-mm34	PHY82SW27502		2	Prof. Ashish Garg	Vijay Raj Singh	IIT Kanpur
		II	Supramolecular Chemistry-I		CHE82SW04004	DBCE	4	Prof. Parimal Kanti Bharadwaj	Dr. Girish Chandra	IIT Kanpur
		IV	Essentials Of Biomolecules : Nucleic Acids And Peptides		CHE92SW02104	DBCE	4	Prof. Lal Mohan Kundu	Dr. Girish Chandra	IIT Guwahati
		II	Industrial Inorganic Chemistry		CHE82SW01104	DBCE	4	Prof. Debashis Ray	Dr. Girish Chandra	IIT Kharagpur
		II	Science Communication: Research Productivity and Data Analytics using		CHE82ME05000	ME	0	Prof. Nabi Hasan, Prof. Mohit Gar	Dr. Girish Chandra	IIT Delhi
3	Mathematics	IV	Computational Mathematics with SageMath	noc25-ma16	MTH92SW05504	DBCE	3	Prof. Ajit Kumar	Dr Pankaj Mishra	Institute of Chemical Technology, Mumbai
		IV	Algebraic Combinatorics	noc25-ma07	MTH92SW05604	DBCE	3	Prof. Amritanshu Prasad, Prof. S. Vishwan	Dr Pankaj Mishra	The Institute of Mathematical Sciences, Chennai
		IV	Computational Number theory and Algebra	noc25-ma16	MTH92SW05704	DBCE	3	Prof. Nitin Saxena, IIT Kanpur	Dr Pankaj Mishra	IIT Kanpur
		IV	Numerical Linear Algebra	noc25-ma42	MTH92SW05804	DBCE	3	Prof. P. N. Agrawal, Prof. D. N. Pandey	Dr Pankaj Mishra	IIT Roorkee
		IV	Graph Theory	noc25-ma26	MTH92SW05902	DBCE	2	Prof. Soumen Maity	Dr Pankaj Mishra	IISER Pune
		IV	Introduction to Probability and Statistics	noc25-mg35	MTH92SW06001	DBCE	1	Prof. G. Srinivasan	Dr Pankaj Mishra	IIT Madras
		II (UG)	The Joy of Computing using Python	noc25-cs69	MTH52SW06303	MD	3	Prof. Sudarshan Iyengar	Dr Pankaj Mishra	IIT Ropar
		II	Scientific Computing using python in Hindi	noc25-ma52	MTH82SW06104	DBCE	3	Prof Mani Mehra and Prof Vivek K Agrawa	Dr Pankaj Mishra	IIT Delhi and DTU Delhi
		IV	Statistical Data Analysis using R		MTH92SW06104	DBCE	4	Prof. Athar Ali Khan	Dr Pankaj Mishra	AMU Aligarh
		IV	Scientific Computing using Matlab	noc25-ma51	MTH92SW0620	DBCE	3	Prof. Mani Mehra	Dr Pankaj Mishra	IIT Delhi
							Prof. Vivek K. Aggarwal			

4	Life Science	II	NA								
		IV	NA								
5	Geology										
			NA								
			NA								
6	Geography	II	NA								
		IV	NA								
7	Computer Science	II	Blockchain and its Applications	noc25-cs08	CSC82SW06203	DBCE	3	Prof. Sandip Chakraborty Prof. Shamik	Dr. Piyush Kumar Singh	IIT Kharagpur	
		II	Data Science for Engineers	noc25-cs20	CSC82SW06302	DBCE	2	Prof. Ragunathan Rengasamy Prof. Sh	Dr. Piyush Kumar Singh	IIT Madras	
		II	Fundamental Algorithms: Design and Analysis	noc25-cs33	CSC82SW06401	DBCE	1	Prof. Sourav Mukhopadhyay	Dr. Piyush Kumar Singh	IIT Kharagpur	
		II	GPU Architectures and Programming	noc25-cs37	CSC82SW06503	DBCE	3	Prof. Soumyajit Dey	Dr. Piyush Kumar Singh	IIT Kharagpur	
		II	Introduction To Internet Of Things	noc25-cs44	CSC82SW06603	DBCE	3	Prof. Sudip Misra	Dr. Piyush Kumar Singh	IIT Kharagpur	
		II	Natural Language Processing	noc25-cs51	CSC82SW06703	DBCE	3	Prof. Pawan Goyal	Dr. Piyush Kumar Singh	IIT Kharagpur	
		II	Parallel Computer Architecture	noc25-cs54	CSC82SW06803	DBCE	3	Prof. Hemangee K. Kapoor	Dr. Piyush Kumar Singh	IIT Guwahati	
		II	Quantum Algorithms and Cryptography	noc25-cs61	CSC82SW06903	DBCE	3	Prof. Shweta Agrawal	Dr. Piyush Kumar Singh	IIT Madras	
		II	Software Testing	noc25-cs66	CSC82SW07001	DBCE	1	Prof. Rajib Mall	Dr. Piyush Kumar Singh	IIT Kharagpur	
		II	User-centric Computing For Human-Computer Interactio	noc25-cs72	CSC82SW07102	DBCE	2	Prof. Samit Bhattacharya	Dr. Piyush Kumar Singh	IIT Guwahati	
		II	Real Time Operating System	noc25-cs78	CSC82SW07201	DBCE	1	Prof. Rajib Mall	Dr. Piyush Kumar Singh	IIT Kharagpur	
8	Artificial Intelligence	II	Introduction to Large Language Models (LLMs)	noc25-cs45	CSC82SW07303	DBCE	3	Prof. Tanmoy Chakraborty Prof. Soum	Dr. Piyush Kumar Singh	IIT Delhi	
		II	Algorithms in Computational Biology and Sequence Ana	noc25-cs06	CAI82SW06003	OEIC	3	Prof. Chirag Jain	Dr. Piyush Kumar Singh	IISc Bangalore	
		II	Systems and Usable Security	noc25-cs68	CAI82SW06101	OEIC	1	Prof. Neminath Hubballi	Dr. Piyush Kumar Singh	IIT Indore	
		II	Blockchain and its Applications	noc25-cs08	CAI82SW06203	DBCE	3	Prof. Sandip Chakraborty Prof. Shamik	Dr. Piyush Kumar Singh	IIT Kharagpur	
		II	Data Science for Engineers	noc25-cs20	CAI82SW06302	DBCE	2	Prof. Ragunathan Rengasamy Prof. Sh	Dr. Piyush Kumar Singh	IIT Madras	
		II	Fundamental Algorithms: Design and Analysis	noc25-cs33	CAI82SW06401	DBCE	1	Prof. Sourav Mukhopadhyay	Dr. Piyush Kumar Singh	IIT Kharagpur	
		II	GPU Architectures and Programming	noc25-cs37	CAI82SW06503	DBCE	3	Prof. Soumyajit Dey	Dr. Piyush Kumar Singh	IIT Kharagpur	
		II	Introduction To Internet Of Things	noc25-cs44	CAI82SW06603	DBCE	3	Prof. Sudip Misra	Dr. Piyush Kumar Singh	IIT Kharagpur	
		II	Natural Language Processing	noc25-cs51	CAI82SW06703	DBCE	3	Prof. Pawan Goyal	Dr. Piyush Kumar Singh	IIT Kharagpur	
		II	Parallel Computer Architecture	noc25-cs54	CAI82SW06803	DBCE	3	Prof. Hemangee K. Kapoor	Dr. Piyush Kumar Singh	IIT Guwahati	
		II	Quantum Algorithms and Cryptography	noc25-cs61	CAI82SW06903	DBCE	3	Prof. Shweta Agrawal	Dr. Piyush Kumar Singh	IIT Madras	
		II	Software Testing	noc25-cs66	CAI82SW07001	DBCE	1	Prof. Rajib Mall	Dr. Piyush Kumar Singh	IIT Kharagpur	
		II	User-centric Computing For Human-Computer Interactio	noc25-cs72	CAI82SW07102	DBCE	2	Prof. Samit Bhattacharya	Dr. Piyush Kumar Singh	IIT Guwahati	
		II	Real Time Operating System	noc25-cs78	CAI82SW07201	DBCE	1	Prof. Rajib Mall	Dr. Piyush Kumar Singh	IIT Kharagpur	
9	Statistics	II	NA								
		IV	NA								
10	Data Science and Applied Statistics	II	NA								
		II	Maternal Infant Young Child Nutrition	NPTTEL68	BTN82SW00803	OEIC	3	Prof. Rupal Dalal	Dr Nitish Kumar	IIT Bombay	
		II	RNA Biology	NPTTEL79	BTN82SW00903	OEIC	3	Prof. Rajesh Ramachandran	Dr Nitish Kumar	IISER Mohali	
		II	Plant Developmental Biology	NPTTEL78	BTN82SW01001	OEIC	1	Prof. Shri Ram Yadav	Dr Nitish Kumar	IIT Roorkee	
		II	Demystifying The Brain	NPTTEL56	BTN82SW01101	OEIC	1	Prof. Srinivas Chakravarthy	Dr Nitish Kumar	IIT Madras	
		II	Bioreactor Design and Analysis	NPTTEL48	BTN82SW01202	OEIC	2	Prof. Smita Srivastava	Dr Nitish Kumar	IIT Bombay	

11	Biotechnology	II	Nanotechnology In Agriculture	NPTEL75	BTN82SW01302	OEIC	2	Prof. Mainak Das	Dr Nitish Kumar	IIT Madras
		IV	Introduction to Intellectual Property	AICTE 9	BTN92SW00803	OEIC	3	Prof. Gouri Gargate	Dr Nitish Kumar	IIT Kharagpur
		IV	Research Methodology and IPR	NITTTR27	BTN92SW00903	OEIC	3	Dr. G. Janardhanan	Dr Nitish Kumar	NITTTR
		IV	Bioelectrochemistry	NPTEL43	BTN92SW01001	OEIC	1	Prof. Mainak Das	Dr Nitish Kumar	IIT Kanpur
		IV	Demystifying The Brain	NPTEL56	BTN92SW01101	OEIC	1	Prof. Srinivas Chakravarthy	Dr Nitish Kumar	IIT Madras
12	Bioinformatics	NA	NA	NA	NA	NA	NA	NA	NA	
13	Pharmaceutics	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	Pharmacology	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Environmental Science	2	Water Resources and Watershed Management	NA	ENV82SW02104	DBCE	4	Dr. Harish Gupta	Dr. Rajesh Kumar Ranjan	Osmania University, Hyderabad
		2	Strategies and Models for Sustainability	MSD-016	ENV82SW02204	DBCE	4	Dr. Y.S.C. Khuman & Dr. Rita Chauhan	Dr. Rajesh Kumar Ranjan	IGNOU, New Delhi
		2	Challenges to Sustainable Development	MSD-017	ENV82SW02304	DBCE	4	Dr. Deeksha Dave and Dr. Y.S.C. Khuman	Dr. Rajesh Kumar Ranjan	IGNOU, New Delhi
		2	Environmental Occupational Hazards	MEV-002	ENV82SW02404	DBCE	4	Dr. Sushmitha Baskar, Prof. Boyina Ramesh	Dr. Rajesh Kumar Ranjan	IGNOU, New Delhi
		2	Global Strategies to Sustainable Development	MSD-019	ENV82SW02504	DBCE	4	Dr. Y. S. C. Khuman	Dr. Rajesh Kumar Ranjan	IGNOU, New Delhi
16	Journalism and Mass Communication	II	NA							
		IV	NA							
17	Psychology	II	NA							
		IV	NA							

