

**ANNEXURE A**

**FOLLOWING NPTEL COURSES ARE SUGGESTED FOR ELECTRONICS &  
TELECOMMUNICATION ENGINEERING,  
ELECTRONICS & COMMUNICATION ENGINEERING REVISED SCHEME and  
ELECTRONIC ENGINEERING (VLSI DESIGN AND TECHNOLOGY) (REVISED  
COURSE 2019-20)  
(January 2024 to June 2024)**

Sr. No	Course ID	Discipline	Course Name	SME Name	Institute	Co-ordinating Institute	Credits	Duration	Semester*
1	noc24-cs55		Introduction to Database Systems	Prof. Sreenivasa Kumar	IITM	IITM	3	12 Weeks	IV
2	noc24-hs06	Humanities and Social Sciences	Emotional Intelligence	Prof. Rabindra Kumar Pradhan	IITKGP	IITKGP	2	8 Weeks	IV
3	noc24-hs15	Humanities and Social Sciences	Soft Skill Development	Prof. Priyadarshi Patnaik Prof. V. N. Giri Prof. D. Suar	IITKGP	IITKGP	2	8 Weeks	IV
4	noc24-hs26	Humanities and Social Sciences	Enhancing Soft Skills and Personality	Prof. T. Ravichandran	IITK	IITK	2	8 Weeks	IV
5	noc24-hs65	Humanities and Social Sciences	Psychology Of Stress, Health And Well-Being	Prof. Dilwar Hussain	IITG	IITG	3	12 Weeks	IV

6	noc24-ph02	Physics	A Brief Course On Superconductivity	Prof. Saurabh Basu	IITG	IITG	1	4 Weeks	IV
7	noc24-cs53	Computer Science and Engineering	Data Science for Engineers	Prof. Ragunathan Rengasamy Prof. Shankar Narasimhan	IITM	IITM	2	8 Weeks	IV
8	noc24-cs01	Computer Science and Engineering	Foundations of Cryptography	Prof. Ashish Choudhury	IIIT Bangalore	IISc	3	12 Weeks	IV
9	noc24-ee70	Electrical and Electronics Engineering	Physics of Nanoscale Devices	Prof. Vishendra Singh Poonia	IITR	IITR	3	12 Weeks	IV
10	noc24-cs34	Computer Science and Engineering	Introduction To Industry 4.0 And Industrial Internet Of Things	Prof. Sudip Misra	IITKGP	IITKGP	3	12 Weeks	IV
11	noc24-cs64	Computer Science and Engineering	Games and Information	Prof. Ankur A. Kulkarni	IITB	IITB	3	12 weeks	VI

12	noc24-me13	Mechanical Engineering	Mechatronics	Prof. Pushparaj Mani Pathak	IITR	IITR	2	8 Weeks	VI
13	noc24-mg63	Management	Yoga and Positive Psychology for Managing Career and Life	Prof. Ashish Pandey	IITB	IITB	2	8 Weeks	VI
14	noc24-cs20	Computer Science and Engineering	Data Analytics with Python	Prof. A Ramesh	IITR	IITR	3	12 Weeks	VI
15	noc24-cs21	Computer Science and Engineering	Data Base Management System	Prof. Partha Pratim Das Prof. Samiran Chattopadhyay	IITKGP	IITKGP	2	8 Weeks	VI
16	noc24-cs22	Computer Science and Engineering	Data Mining	Prof. Pabitra Mitra	IITKGP	IITKGP	2	8 Weeks	VI
17	noc24-cs66	Computer Science and Engineering	Edge Computing	Prof. Rajiv Misra	IITP	IITK	2	8 Weeks	VI
18	noc24-ee21	Electrical and Electronics	Modern Computer Vision	Prof. A. N. Rajagopalan	IITM	IITM	3	12 Weeks	VI

		Engin eering							
19	noc24- ma18	Math emati cs	Essentials Of Data Science With R Software - 1: Probability And Statistical Inference	Prof. Shalabh	IITK	IITK	3	12 We eks	VI
28	noc24- ma19	Math emati cs	Essentials Of Data Science With R Software - 2: Sampling Theory And Linear Regression Analysis	Prof. Shalabh	IITK	IITK	3	12 We eks	VI
20	noc24- ma23	Math emati cs	Graph Theory	Prof. Soumen Maity	IISER PUNE	IITM	2	8 We eks	VI
21	noc24- ma31	Math emati cs	Linear Algebra	Prof. Pranav Haridas	Kerala Schoo l of Math emati cs	IITM	3	12 We eks	VI
22	noc24- mg08	Mana geme nt	Business analytics and data mining Modeling using R	Prof. Gaurav Dixit	IITR	IITR	3	12 We eks	VI
23	noc24- mg14	Mana geme nt	Data Analysis and Decision Making - I	Prof. Raghu Nandan Sengupt a	IITK	IITK	3	12 We eks	VI
24	noc24- cs04	Comp uter Scienc e and	Privacy and Security in Online Social Media	Prof. Ponnur angam Kumara guru	IITH	IITM	3	12 we eks	VI

		Engin eering							
25	noc24- hs07	Huma nities and Social Scienc es	Introduction On Intellectual Property To Engineers And Technologists	Prof. Tapas Kumar Bandyo padhya y	IITKG P	IITKGP	2	8 We eks	VI
26	noc24- de08	Desig n Engin eering	Design, Technology and Innovation	Prof. B. K. Chakrav arthy	IITB	IITB	2	8 We eks	VI
27	noc24- de09	Desig n Engin eering	Innovation by Design	Prof. B. K. Chakrav arthy	IITB	IITB	1	4 We eks	VI
29	noc24- ag02	Agricu lture Engin eering	Machine Learning For Soil And Crop Management	Prof. Somsu bra Chakrab orty	IITKG P	IITKGP	3	12 We eks	VIII
30	noc24- ce48	Earth Scienc es	Remote Sensing and GIS for rural development	Prof. Pennan Chinnas amy	IITB	IITB	3	12 We eks	VIII
31	noc24- cs31	Comp uter Scienc e and Engin eering	Information Security - 5 - Secure Systems Engineering	Prof. Chester Robeiro	IITM	IITM	2	8 We eks	VIII
32	noc24- ee22	Electri cal and Electr onics Engin eering	Multirate DSP	Prof. R. David Koilpilla i	IITM	IITM	3	12 We eks	VIII

33	noc24-ee37	Electrical and Electronics Engineering	Smart Grid: Basics to Advanced Technologies	Prof. N. P. Padhy, Prof. Premalata Jena	IITR	IITR	3	12 Weeks	VIII
34	noc24-ee67	Electrical and Electronics Engineering	EMI /EMC and Signal Integrity: Principles, Techniques and Applications	Prof. Amitabha Bhattacharya	IITKGP	IITKGP	3	12 Weeks	VIII
35	noc24-cs54	Computer Science and Engineering	Python for Data Science	Prof. Ragunathan Rengasamy	IITM	IITM	1	4 Weeks	VIII
36	noc24-cs23	Computer Science and Engineering	Design and analysis of algorithms	Prof. Madhavan Mukund	CMI	IITM	2	8 Weeks	VIII
37	noc24-cs30	Computer Science and Engineering	GPU Architectures And Programming	Prof. Soumyajit Dey	IITKGP	IITKGP	3	12 Weeks	VIII
38	noc24-cs65	Computer Science and Engineering	Business Intelligence & Analytics	Prof. Saji K Mathew	IITM	IITM	3	12 Weeks	VIII

39	noc24-ge21	Multi disciplinary	Introduction to Research (New: Research Methodology)	Prof. Edamana Prasad Prof. Prathap Haridos	IITM	IITM	2	8 Weeks	VIII
40	noc24-lw02	Law	IP Management & Technology Transfer	Prof. Gouri Gargate	IITKG P	IITKGP	2	8 Weeks	VIII
41	noc24-mg09	Management	Business Analytics For Management Decision	Prof. Rudra P Pradhan	IITKG P	IITKGP	3	12 Weeks	VIII
42	noc24-mg44	Management	Modelling And Analytics For Supply Chain Management	Prof. Kunal Kanti Ghosh Prof. Anupam Ghosh	IITKG P	IITKGP	3	12 Weeks	VIII
43	noc24-mg45	Management	Organizational Behaviour: Individual Dynamics in Organization	Prof. Abraham Cyril Issac	IITG	IITG	3	12 Weeks	VIII
44	noc24-mg47	Management	Principles of Management	Prof. Usha Lenka	IITR	IITR	3	12 Weeks	VIII

\* Based on Syllabus & level of difficulty, the courses are suggested for students of IV, VI & VIII Semester

Note: The credits will be awarded based on the scheme proposed above. The student shall submit all the NPTEL/SWAYAM certificates to university through Heads of Department while applying for the degree.