

ELECTRONICS AND COMPUTER ENGINEERING
AND
ELECTRONICS AND COMPUTER SCIENCE ENGINEERING
LIST OF ONLINE NPTEL/SWAYAM COURSES FOR EVEN SEMESTER (RC19-20)
FOR THE ACADEMIC YEAR: 2024 – 25 (JANUARY TO MAY 2025)

Sr. No	Course ID	Course Name	SME Name	Institute	Duration	Link	Credits	For Semester
1	noc25-ae02	Aircraft Design	Prof. A.K.Ghosh	IIT Kanpur	12 weeks	https://onlinecourses.nptel.ac.in/noc25_ae02/preview	3	IV,VI,VIII
2	noc25-cs08	Blockchain and its Applications	Prof. Sandip Chakraborty Prof. Shamik Sural	IIT Kharagpur	12 weeks	https://onlinecourses.nptel.ac.in/noc25_cs08/preview	3	VI, VIII
3	noc25-cs60	Python for Data Science	Prof. Ragunathan Rengasamy	IIT Madras	4 weeks	https://onlinecourses.nptel.ac.in/noc25_cs60/preview	1	IV,VI,VIII
4	noc25-cs17	Data Analytics with Python	Prof. A Ramesh	IIT Roorkee	12 weeks	https://onlinecourses.nptel.ac.in/noc25_cs17/preview	3	VI,VIII
5	noc25-cs21	Deep Learning	Prof. Sudarshan Iyengar	IIT Ropar	12 weeks	https://onlinecourses.nptel.ac.in/noc25_cs21/preview	3	VI,VIII
6	noc25-cs66	Software Testing	Prof. Rajib Mall	IIT Kharagpur	4 weeks	https://onlinecourses.nptel.ac.in/noc25_cs66/preview	1	IV,VI,VIII
7	noc25-cs45	Introduction to Large Language Models (LLMs)	Prof. Tanmoy Chakraborty Prof. Soumen Chakraborti	IIT Delhi	12 weeks	https://onlinecourses.nptel.ac.in/noc25_cs45/preview	3	VI,VIII
8	noc25-cs27	Discrete Mathematics for CS	Prof. Nitin Saxena	IIT Kanpur	12 weeks	https://onlinecourses.nptel.ac.in/noc25_cs27/preview	3	IV,VI,VIII
9	noc25-cs79	Privacy and Security in Online Social Media	Prof. Ponnuram Kumaraguru	IIIT Hyderabad	12 weeks	https://onlinecourses.nptel.ac.in/noc25_cs79/preview	3	IV,VI,VIII
10	noc25-cs69	The Joy of Computing using Python	Prof. Sudarshan Iyengar	IIT Ropar	12 weeks	https://onlinecourses.nptel.ac.in/noc25_cs69/preview	3	IV,VI,VIII
11	noc25-cs20	Data Science for Engineers	Prof. Ragunathan Rengasamy Prof. Shankar Narasimhan	IIT Madras	8 weeks	https://onlinecourses.nptel.ac.in/noc25_cs20/preview	2	VI, VIII
12	noc25-cs22	Deep Learning for Natural Language Processing	Prof. Pawan Goyal	IIT Kharagpur	12 weeks	https://onlinecourses.nptel.ac.in/noc25_cs22/preview	3	VI, VIII
13	noc25-ee13	Computer Vision And Image Processing - Fundamentals And Applications	Prof. M. K. Bhuyan	IIT Guwahati	12 weeks	https://onlinecourses.nptel.ac.in/noc25_ee13/preview	3	IV,VI,VIII
14	noc25-ee34	Evolution of Air Interface towards 5G	Prof. Suvra Sekhar Das	IIT Kharagpur	8 weeks	https://onlinecourses.nptel.ac.in/noc25_ee34/preview	2	VI,VIII
15	noc25-ee54	Network Security	Prof. Gaurav S. Kasbekar	IIT Bombay	12 weeks	https://onlinecourses.nptel.ac.in/noc25_ee54/preview	3	VI,VIII

16	noc25-ee89	Intelligent Control of Robotic Systems	Prof. M. Felix Orlando	IIT Roorkee	4 weeks	https://onlinecourses.nptel.ac.in/noc25_ee89/preview	1	IV,VI,VIII
17	noc25-ma27	High Performance Scientific Computing	Prof. Shivasubramanian Gopalakrishnan Prof. Om Jadhav Prof. S Vamshi Krishna Prof. Ashish Kuvelkar	IIT Bombay	12 weeks	https://onlinecourses.nptel.ac.in/noc25_ma27/preview	3	VI,VIII
18	noc25-ee76	Sensors and Actuators	Prof. Hardik Jeetendra Pandya	IISc Bangalore	12 weeks	https://onlinecourses.nptel.ac.in/noc25_ee76/preview	3	IV,VI,VIII
19	noc25-hs38	Introduction On Intellectual Property To Engineers And Technologists	Prof. Tapas Kumar Bandyopadhyay	IIT Kharagpur	8 weeks	https://onlinecourses.nptel.ac.in/noc25_hs38/preview	2	IV,VI,VIII
20	noc25-hs72	Soft Skill Development	Prof. Priyadarshi Patnaik Prof. V. N. Giri Prof. D. Suar	IIT Kharagpur	8 weeks	https://onlinecourses.nptel.ac.in/noc25_hs72/preview	2	IV,VI,VIII
21	noc25-hs61	Patent Law for Engineers and Scientists	Prof. Feroz Ali	IIT Madras	12 weeks	https://onlinecourses.nptel.ac.in/noc25_hs61/preview	3	IV,VI,VIII
22	noc25-mg06	AI in Marketing	Prof. Zillur Rahman	IIT Roorkee	12 weeks	https://onlinecourses.nptel.ac.in/noc25_mg07/preview	3	VI,VIII
23	noc25-mg12	Business Ethics	Prof. Susmita Mukhopadhyay	IIT Kharagpur	12 weeks	https://onlinecourses.nptel.ac.in/noc25_mg12/preview	3	IV,VI,VIII
24	noc25-mg34	Introduction to Operations Research	Prof. G. Srinivasan	IIT Madras	8 Weeks	https://onlinecourses.nptel.ac.in/noc25_mg34/preview	2	IV,VI,VIII
25	noc25-mg67	Ethics in Engineering Practice	Prof. Susmita Mukhopadhyay	IIT Kharagpur	8 weeks	https://onlinecourses.nptel.ac.in/noc25_mg67/preview	2	IV,VI,VIII
26	noc25-mg13	Business Fundamentals for Entrepreneurs	Prof. Devdip Purkayastha	IIT Bombay	12 weeks	https://onlinecourses.nptel.ac.in/noc25_mg13/preview	3	IV,VI,VIII
27	noc25-ma52	Scientific Computing using Python	Prof. Mani Mehra Prof. Vivek K. Aggarwal	IIT Delhi	12 weeks	https://onlinecourses.nptel.ac.in/noc25_ma52/preview	3	VI,VIII
28	noc25-me85	Advanced Robotics Applications	Prof. Ashish Dutta	IIT Kanpur	8 weeks	https://onlinecourses.nptel.ac.in/noc25_me85/preview	2	VI,VIII
29	noc25-ge30	Roadmap for patent creation	Prof. Gouri Gargate	IIT Kharagpur	8 weeks	https://onlinecourses.nptel.ac.in/noc25_ge30/preview	2	IV,VI,VIII
30	noc25-de01	Design, Technology and Innovation	Prof. B.K. Chakravarthy	IIT Bombay	8 weeks	https://onlinecourses.nptel.ac.in/noc25_de01/preview	2	IV,VI,VIII
31	noc25-mg09	Business analytics and data mining Modeling using R	Prof. Gaurav Dixit	IIT Roorkee	12 weeks	https://onlinecourses.nptel.ac.in/noc25_mg09/preview	3	VI,VIII
32	noc25-mg38	Leadership and Team Effectiveness	Prof. Santosh Rangnekar	IIT Roorkee	12 Weeks	https://onlinecourses.nptel.ac.in/noc25_mg38/preview	3	IV,VI,VIII

33	noc25-cs36	Getting Started with Competitive Programming	Prof. Neeldhara Misra	IIT Gandhinagar	12 weeks	https://onlinecourses.nptel.ac.in/noc25_cs36/preview	3	IV,VI,VIII
34	noc25-cs43	Introduction To Industry 4.0 And Industrial Internet Of Things	Prof. Sudip Misra	IIT Kharagpur	12 weeks	https://onlinecourses.nptel.ac.in/noc25_cs43/preview	3	IV,VI,VIII
35	noc25-cs68	Systems and Usable Security	Prof. Neminath Hubballi	IIT Indore	4 weeks	https://onlinecourses.nptel.ac.in/noc25_cs68/preview	1	VI,VIII
36	noc25-de10	Design Practices for Intelligent Product Design	Prof. Bishakh Bhattacharya	IIT Kanpur	8 weeks	https://onlinecourses.nptel.ac.in/noc25_de10/preview	2	VI,VIII
37	noc25-hs16	Elements of Literature and Creative Communication	Prof. H.S. Komalesha	IIT Kharagpur	8 Weeks	https://onlinecourses.nptel.ac.in/noc25_hs16/preview	2	IV,VI,VIII
38	noc25-hs72	Soft Skill Development	Prof. Priyadarshi Patnaik	IIT Kharagpur	8 Weeks	https://onlinecourses.nptel.ac.in/noc25_hs72/preview	2	IV,VI,VIII
39	noc25-hs25	German - I	Prof. Milind Brahme	IIT Madras	12 Weeks	https://onlinecourses.nptel.ac.in/noc25_hs25/preview	3	IV,VI,VIII
40	noc25-cs20	Data Science for Engineers	Prof. Ragunathan Rengasamy	IIT Madras	8 Weeks	https://onlinecourses.nptel.ac.in/noc25_cs20/preview	2	VI,VIII
41	noc25-cs11	Cloud Computing	Prof. Soumya Kanti Ghosh	IIT Kharagpur	12 Weeks	https://onlinecourses.nptel.ac.in/noc25_cs11/preview	3	VI,VIII
42	noc25-cs22	Deep Learning for Natural Language Processing	Prof. Pawan Goyal	IIT Kharagpur	12 Weeks	https://onlinecourses.nptel.ac.in/noc25_cs22/preview	3	VI,VIII
43	noc25-ee61	Photonic integrated circuit	Prof. Shankar Kumar Selvaraja	IISc Bangalore	12 Weeks	https://onlinecourses.nptel.ac.in/noc25_ee61/preview	3	VI,VIII
44	noc25-ee76	Sensors and Actuators	Prof. Hardik Jeetendra Pandya	IISc Bangalore	12 Weeks	https://onlinecourses.nptel.ac.in/noc25_ee76/preview	3	VI,VIII
45	noc25-mg05	AI in Human Resource Management	Prof. Abraham Cyril Issac	IIT Guwahati	12 Weeks	https://onlinecourses.nptel.ac.in/noc25_mg05/preview	3	VI,VIII
46	noc25-mg14	Business Law for Managers	Prof. S. Srinivasan Prof. Kaushik Mukherjee	IIT Kharagpur	8 Weeks	https://onlinecourses.nptel.ac.in/noc25_mg14/preview	2	VI,VIII
47	noc25-mg38	Leadership and Team Effectiveness	Prof. Santosh Rangnekar	IIT Roorkee	12 Weeks	https://onlinecourses.nptel.ac.in/noc25_mg38/preview	3	VI,VIII
48	noc25-mg52	Principles of Management	Prof. Usha Lenka	IIT Roorkee	12 Weeks	https://onlinecourses.nptel.ac.in/noc25_mg52/preview	3	IV,VI,VII
49	noc25-me04	Advanced Robotics	Prof. Ashish Dutta	IIT Kanpur	12 Weeks	https://onlinecourses.nptel.ac.in/noc25_me04/preview	3	IV,VI
50	noc25-ee89	Intelligent Control of Robotic Systems	Prof. M. Felix Orlando	IIT Roorkee	4 weeks	https://onlinecourses.nptel.ac.in/noc25_ee89/preview	1	IV,VI
52	noc25-cs60	Python for Data Science	Prof. Ragunathan Rengasamy	IIT Madras	4 Weeks	https://onlinecourses.nptel.ac.in/noc25_cs60/preview	1	IV,VI
53	noc25-cs43	Introduction To Industry 4.0 And Industrial Internet Of Things	Prof. Sudip Misra	IIT Kharagpur	12 Weeks	https://onlinecourses.nptel.ac.in/noc25_cs43/preview	3	IV,VI

54	noc25-cs78	Real Time Operating System	Prof. Rajib Mall	IIT Kharagpur	4 Weeks	https://onlinecourses.nptel.ac.in/noc25_cs78/preview	1	IV
55	noc25-ee47	Medical Image Analysis	Prof. Debodoot Sheet	IIT Kharagpur	4 Weeks	https://onlinecourses.nptel.ac.in/noc25_ee47/preview	1	VI, VIII
56	noc25-hs60	Patent Drafting for Beginners	Prof. Feroz Ali	IIT Madras	4 Weeks	https://onlinecourses.nptel.ac.in/noc25_hs60/preview	1	VI, VII
57	noc25-mg18	Design Thinking - A Primer	Prof. Ashwin Mahalingam		4 Weeks	https://onlinecourses.nptel.ac.in/noc25_mg18/preview	1	IV
58	noc25-mg08	Artificial Intelligence (AI) for Investments	Prof. Abhinava Tripathi	IIT Kanpur	12 Weeks	https://onlinecourses.nptel.ac.in/noc25_mg08/preview	3	IV,VI

NOTE:

- 1) The credits will be awarded based on the scheme proposed above
- 2) Students should mandatorily undertake ONE NPTEL/SWAYAM Course of 3 CREDITS between 5th to 7th Semester against 8th semester course ECOMP/ECS 830 Elective – NPTEL/MOOC/SWAYAM
- 3) The student shall submit the NPTEL/SWAYAM certificates to Goa University through Heads of Department while applying for the degree.

