

ANNEXURE I**BOS in COMPUTER ENGINEERING****LIST OF ONLINE NPTEL/SWAYAM COURSES FOR EVEN SEMESTER (RC 19-20)****FOR THE ACADEMIC YEAR 2024-25 (Jan-April 2025)****SEMESTER IV**

Sr. No	Course ID	Course Name	SME Name	Institute	Duration	Credits	Click here to Join the course
1	noc25_cs15	Computer Networks And Internet Protocol	Prof. Soumya Kanti Ghosh Prof. Sandip Chakraborty	IIT Kharagpur	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs15/preview
2	noc25_cs23	Design and analysis of algorithms	Prof. Madhavan Mukund	CMI	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_cs23/preview
3	noc25_cs30	Embedded Systems Design	Prof. Anupam Basu	IIT Kharagpur	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs30/preview
4	noc25_cs36	Getting Started with Competitive Programming	Prof. Neeldhara Misra	IIT Gandhinagar	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs36/preview
5	noc25_cs46	Introduction to Machine Learning	Prof. Balaraman Ravindran	IIT Madras	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs46/preview
6	noc25_cs58	Programming in Modern C++	Prof. Partha Pratim Das	IIT Kharagpur	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs58/preview
7	noc25_cs59	Programming, Data Structures And Algorithms Using Python	Prof. Madhavan Mukund	CMI	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_cs59/preview
8	noc25_cs60	Python for Data Science	Prof. Ragunathan Rengasamy	IIT Madras	4 Weeks	1	https://onlinecourses.nptel.ac.in/noc25_cs60/preview
9	noc25_cs69	The Joy of Computing using Python	Prof. Sudarshan Iyengar	IIT Ropar	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs69/preview
10	noc25_de08	Usability Engineering	Prof. Debayan Dhar	IIT Guwahati	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_de08/preview
11	noc25_hs72	Soft Skill Development	Prof. Priyadarshi Patnaik Prof. V. N. Giri Prof. D. Suar	IIT Kharagpur	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_hs72/preview
12	noc25_hs87	Enhancing Soft Skills and Personality	Prof. T. Ravichandran	IIT Kanpur	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_hs87/preview
13	noc25_mg67	Ethics in Engineering Practice	Prof. Susmita Mukhopadhyay	IIT Kharagpur	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_mg67/preview

14	noc25_cs14	Computational Number Theory and Algebra	Prof.Nitin Saxena	IIT Kanpur	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs38/preview
SEMESTER VI							
Sr. No	Current course ID	Course Name	SME Name	Institute	Duration	Credits	Click here to Join the course
1	noc25_cs02	Advanced Computer Networks	Prof. Neminath Hubballi Prof. Sameer Kulkarni	IIT Indore IIT Gandhi Nagar	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs02/preview
2	noc25_cs03	Advanced Graph Theory	Prof. Rajiv Misra	IIT Patna	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_cs03/preview
3	noc25_cs05	AI:Constraint Satisfaction	Prof. Deepak Khemani	IIT Madras	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_cs05/preview
4	noc25_cs07	Artificial Intelligence: Knowledge Representation And Reasoning	Prof. Deepak Khemani	IIT Madras	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs07/preview
5	noc25_cs08	Blockchain and its Applications	Prof. Sandip Chakraborty Prof. Shamik Sural	IIT Kharagpur	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs08/preview
6	noc25_cs17	Data Analytics with Python	Prof. A Ramesh	IIT Roorkee	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs17/preview
7	noc25_cs21	Deep Learning - IIT Ropar	Prof. Sudarshan Iyengar	IIT Ropar	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs21/preview
8	noc25_cs24	Design and Engineering of Computer Systems	Prof. Mythili Vutukuru	IIT Bombay	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_cs24/preview
9	noc25_cs25	Digital Design with Verilog	Prof. Chandan Karfa, Prof. Aryabartta Sahu	IIT Guwahati	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs25/preview
10	noc25_cs28	Edge Computing	Prof. Rajiv Misra	IIT Patna	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_cs28/preview
11	noc25_cs29	Embedded System Design with ARM	Prof. Indranil Sengupta Prof. Kamalika Dutta	IIT Kharagpur	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_cs29/preview
12	noc25_cs39	Information Security - 5 - Secure Systems Engineering	Prof. Chester Robeiro	IIT Madras	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_cs39/preview
13	noc25_cs43	Introduction To Industry 4.0 And Industrial Internet Of Things	Prof. Sudip Misra	IIT Kharagpur	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs43/preview
14	noc25_cs54	Parallel Computer Architecture	Prof. Hemangee K. Kapoor	IIT Guwahati	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs54/preview

15	noc25_cs72	User-centric Computing For Human-Computer Interaction	Prof. Samit Bhattacharya	IIT Guwahati	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_cs72/preview
16	noc25_cs75	Foundation of Cloud IoT Edge ML	Prof. Rajiv Misra	IIT Patna	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_cs75/preview
17	noc25_cs77	Linear programming and its applications to computer science	Prof. Rajat Mittal	IIT Kanpur	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_cs77/preview
18	noc25_cs79	Privacy and Security in Online Social Media	Prof. Ponnurangam Kumaraguru	IIIT Hyderabad	12 weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs79/preview
19	noc25_de07	Understanding Incubation and Entrepreneurship	Prof. B.K. Chakravarthy	IIT Bombay	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_de07/preview
20	noc25_ee03	An Introduction to Information Theory	Prof. Adrish Banerjee	IIT Kanpur	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_ee03/preview
21	noc25_hs60	Patent Drafting for Beginners	Prof. Feroz Ali	IIT Madras	4 Weeks	1	https://onlinecourses.nptel.ac.in/noc25_hs60/preview
22	noc25_mg71	Project Management	Prof. Ramesh Anbanandam	IIT Roorkee	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_mg71/preview
23	noc25_ge15	Fuzzy Logic and Neural Networks	Prof. Dilip Kumar Pratihar	IIT Kharagpur	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_ge15/preview
24	noc25_ge39	Recommender Systems	Prof. Mamata Jenamani	IIT Kharagpur	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_ge39/preview

SEMESTER VIII

Sr. No	Current course ID	Course Name	SME Name	Institute	Duration	Credits	Click here to Join the course
1	noc25_cs38	Human Computer Interaction (In English)	Prof. Rajiv Ratn Shah	IIIT Delhi	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs38/preview
2	noc25_cs49	Machine Learning for Engineering and science applications	Prof. Balaji Srinivasan Prof. Ganapathy Krishnamurthi	IIT Madras	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs49/preview
3	noc25_cs51	Natural Language Processing	Prof. Pawan Goyal	IIT Kharagpur	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs51/preview
4	noc25_cs62	Reinforcement Learning	Prof. Balaraman Ravindran	IIT Madras	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs62/preview
5	noc25_ee16	Deep Learning	Prof. Prabir Kumar Biswas	IIT Kharagpur	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_ee16/preview
6	noc25_cs22	Deep Learning for Natural Language Processing	Prof. Pawan Goyal	IIT Kharagpur	12 weeks	3	https://onlinecourses.nptel.ac.in/noc25_cs22/preview

7	noc25_ee13	Computer Vision And Image Processing - Fundamentals And Applications	Prof. M. K. Bhuyan	IIT Guwahati	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_ee13/preview
8	noc25_ee40	Fuzzy Sets, Logic and Systems & Applications	Prof. Nishchal Kumar Verma	IIT Kanpur	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_ee40/preview
9	noc25_ee47	Medical Image Analysis	Prof. Debdoot Sheet	IIT Kharagpur	4 Weeks	1	https://onlinecourses.nptel.ac.in/noc25_ee47/preview
10	noc25_ee51	Modern Computer Vision	Prof. A. N. Rajagopalan	IIT Madras	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_ee51/preview
11	noc25_hs38	Introduction On Intellectual Property To Engineers And Technologists	Prof. Tapas Kumar Bandyopadhyay	IIT Kharagpur	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc25_hs38/preview
12	noc25_hs61	Patent Law for Engineers and Scientists	Prof. Feroz Ali	IIT Madras	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_hs61/preview
13	noc25_mg09	Business analytics and data mining Modeling using R	Prof. Gaurav Dixit	IIT Roorkee	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_mg09/preview
14	noc25_ma20	Essentials of Data Science With R Software-1: Probability and Statistical Inference	Prof. Shalabh	IIT Kanpur	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc25_ma20/preview

Note:

1. The credits will be awarded based on scheme proposed above.
2. Students should mandatory undertake one NPTEL/SWAYAM course of only 3 credits from the above list between 5th to 7th semester against 8th-semester course i.e. CE820 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.

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