685 NPTEL VIDEO COURSES DETAIL (With Direct Access Link to 26,740 Video Lectures - Updated as on November 29, 2016)

Electronics and Communication Engineering

No.	Courses	Coordinators	Institute	Syllabus	PDF	MP3
1	CMOS Analog VLSI Design	Prof. A.N. Chandorkar	IIT Bombay	**Syllabus**	N	Y
2	Adaptive Signal Processing	Prof. Mrityunjoy Chakraborty	IIT Kharagpur	**Syllabus**	Y	Y
3	Adv. Digital Signal Processing - Multirate and wavelets	Prof. V.M. Gadre	IIT Bombay	Syllabus	Y	Y
4	Advanced 3G and 4G Wireless Mobile Communications	Prof. Aditya K. Jagannatham	IIT Kanpur	Syllabus	Y	Y
5	Advanced Logic Synthesis	Dhiraj Taneja	IIT Madras	Syllabus	N	Y
6	Advanced Optical Communication	Prof. R.K. Shevgaonkar	IIT Bombay	Syllabus	Y	Y
7	Advanced VLSI Design	Prof. A.N. Chandorkar,Prof. D.K. Sharma,Prof. Sachin Patkar,Prof. Virendra Singh	IIT Bombay	Syllabus	N	Y
8	Analog Circuits	Prof. A.N. Chandorkar	IIT Bombay	**Syllabus**	N	Y
9	Analog Circuits and Systems 1	Prof. K. Radhakrishna Rao	IISc Bangalore	Syllabus	N	N
10	Analog IC Design	Dr. Nagendra Krishnapura	IIT Madras	Syllabus	Y	Y
11	ARM Based Development	S.Chandramouleeswaran	IIT Madras	Syllabus	N	Y
12	Basic Electrical Circuits	Dr. Nagendra Krishnapura	IIT Madras	Syllabus	Y	Y
13	Basic Electronics	Prof. Chitralekha Mahanta	IIT Guwahati	Syllabus	Y	Y
14	Broadband Networks: Concepts and Technology	Prof. Abhay Karandikar	IIT Bombay	Syllabus	Y	Y
15	Circuits for Analog System Design	Prof. M.K. Gunasekaran	IISc Bangalore	Syllabus	Y	Y
16	Coding Theory	Dr. Andrew Thangaraj	IIT Madras	Syllabus	Y	Y
17	Communication Engineering	Prof. Surendra Prasad	IIT Delhi	Syllabus	Y	Y
18	Digital Circuits and Systems	Prof. S. Srinivasan	IIT Madras	Syllabus	Y	Y
19	Digital Communication	Prof. Bikash Kumar Dey	IIT Bombay	**Syllabus**	Y	Y
20	Digital Computer Organization	Prof. P.K. Biswas	IIT Kharagpur	**Syllabus**	Y	Y
21	Digital Image Processing	Prof. P.K. Biswas	IIT Kharagpur	Syllabus	Y	Y
22	Digital Signal Processing	Prof. S.C. Dutta Roy	IIT Delhi	Syllabus	Y	Y
23	Digital Switching	Prof. Yatindra N Singh	IIT Kanpur	Syllabus	Y	Y
24	Digital System design with PLDs and FPGAs	Prof. Kuruvilla Varghese	IISc Bangalore	Syllabus	N	Y
25	Digital Systems Design	Prof. D. Roychoudhury	IIT Kharagpur	Syllabus	Y	Y
26	Digital Voice & Picture Communication	Prof. Somnath Sengupta	IIT Kharagpur	**Syllabus**	Y	Y
27	Electronics for Analog Signal Processing - I	Prof. K. Radhakrishna Rao	IIT Madras	**Syllabus**	Y	Y
28	Electronics for Analog Signal Processing - II	Prof. K. Radhakrishna Rao	IIT Madras	**Syllabus**	Y	Y
29	Embedded Software Testing	MADHUKESHWARA H M	IIT Madras	Syllabus	N	Y
30	Error Correcting Codes	Prof. P. Vijay Kumar	IISc Bangalore	Syllabus	Y	Y
31	High Speed Devices and Circuits	Prof. K.N. Bhat	IIT Madras	Syllabus	Y	Y
32	Information Theory and Coding	Prof. S.N. Merchant	IIT Bombay	**Syllabus**	Y	Y
33	Linux Programming & Scripting	Anand Iyer	IIT Madras	Syllabus	N	Y
34	MEMS and Microsystems	Prof. Santiram Kal	IIT Kharagpur	**Syllabus**	Y	Y
35	Nanoelectronics: Devices and Materials	Dr. Navakanta Bhat,Dr. S.A. Shivashankar,Prof. K.N. Bhat	IISc Bangalore	Syllabus	N	Y
36	Neural Networks and Applications	Prof. Somnath Sengupta	IIT Kharagpur	**Syllabus**	Y	Y
37	NOC:An Introduction to Information Theory	Dr. Adrish Banerjee	IIT Kanpur	Syllabus	N	Y

38	NOC:Audio System Engineering	Prof. S. Dasmandal	IIT Kharagpur	Syllabus	N	Y
39	NOC:Basic Building Blocks of Microwave Engineering	Dr. Amitabha Bhattacharya	IIT Kharagpur	Syllabus	N	Y
40	NOC:Basic Electrical Circuits	Dr. Nagendra Krishnapura	IIT Madras	Syllabus	N	Y
41	NOC:Basic Tools of Microwave Engineering	Dr. Amitabha Bhattacharya	IIT Kharagpur	Syllabus	N	Y
42	NOC:Bayesian/ MMSE Estimation for Wireless Communications -MIMO/ OF	Prof. Aditya K. Jagannatham	IIT Kanpur	Syllabus	N	Y
43	NOC:Design and Simulation of DC-DC converters using open source tools	Prof. L. Umanand	IISc Bangalore	Syllabus	N	Y
44	NOC:Digital Circuits and Systems	Prof. Shankar Balachandran	IIT Madras	Syllabus	N	Y
45	NOC:Digital Image Processing	Prof. P.K. Biswas	IIT Kharagpur	Syllabus	N	Y
46	NOC:Digital Switching - I	Prof. Yatindra N Singh	IIT Kanpur	Syllabus	N	Y
47	NOC:Discrete Time Signal Processing	Prof. Mrityunjoy Chakraborty	IIT Kharagpur	Syllabus	N	Y
48	NOC:Error Control Coding: An Introduction to Convolutional Codes	Dr. Adrish Banerjee	IIT Kanpur	Syllabus	N	Y
49	NOC:Error control coding: An introduction to linear block code	Dr. Adrish Banerjee	IIT Kanpur	Syllabus	N	Y
50	NOC:Estimation for Wireless Communications - MIMO/ OFDM Cellular and	Prof. Aditya K. Jagannatham	IIT Kanpur	Syllabus	N	Y
51	NOC:Foundations of Wavelets and Multirate Digital Signal Processing	Prof. V.M. Gadre	IIT Bombay	Syllabus	N	Y
52	NOC:Fundamentals of MIMO Wireless Communication	Prof. Suvra Sekhar Das	IIT Kharagpur	Syllabus	N	Y
53	NOC:Microwave Integrated Circuits	Prof. Jayanta Mukherjee	IIT Bombay	Syllabus	N	Y
54	NOC:Networks and Systems(Course sponsored by Aricent)	Prof. V.G.K. Murti,Dr. Andrew Thangaraj,C. S. Ramalingam	IIT Madras	Syllabus	N	Y
55	NOC:Optical communications	Dr. Pradeep Kumar K	IIT Kanpur	Syllabus	N	Y
56	NOC:Principles of Modern CDMA/ MIMO/ OFDM Wireless Communications	Prof. Aditya K. Jagannatham	IIT Kanpur	Syllabus	Y	Y
57	NOC:Probability and Random Variables/ Processes for Wireless Communic	Prof. Aditya K. Jagannatham	IIT Kanpur	Syllabus	N	Y
58	NOC:Satellite Communication Systems	Prof. Kalyankumar Bandyopadhyay	IIT Kharagpur	Syllabus	N	Y
59	NOC:VLSI Design Verification and test	Dr. Santosh Biswas,Jatindra Kumar Deka,Prof.Arnab sarkar	IIT Guwahati	Syllabus	N	Y
60	Pattern Recognition	Prof. P.S. Sastry	IISc Bangalore	Syllabus	Y	Y
61	Pattern Recognition and Application	Prof. P.K. Biswas	IIT Kharagpur	Syllabus	Y	Y
62	Probability and Random Processes	Prof. Mrityunjoy Chakraborty	IIT Kharagpur	Syllabus	Y	Y
63	RF Integrated Circuits	Dr. Shouribrata Chatterjee	IIT Delhi	Syllabus	Y	Y
64	Semiconductor Device Modeling	Prof. S. Karmalkar	IIT Madras	Syllabus	N	Y
65	Signals and Systems	Prof. K.S. Venkatesh	IIT Kanpur	Syllabus	Y	Y
66	Solid State Devices	Prof. S. Karmalkar	IIT Madras	Syllabus	Y	Y
67	Transmission Lines and EM Waves	Prof. R.K. Shevgaonkar	IIT Bombay	Syllabus	Y	Y
68	VLSI Circuits	Prof. S. Srinivasan	IIT Madras	Syllabus	Y	Y
69	VLSI Data Conversion Circuits	Dr. Shanthi Pavan	IIT Madras	Syllabus	Y	Y
70	VLSI Technology	Dr. Nandita Dasgupta	IIT Madras	**Syllabus**	Y	Y
71	Wireless Communication	Prof. Ranjan Bose	IIT Delhi	**Syllabus**	Y	Y