

#### **WHAT IS A NPTEL?**

NPTEL is an acronym for National Programme on Technology Enhanced Learning which is an initiative by seven Indian Institutes of Technology (IIT Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras and Roorkee) and Indian Institute of Science (IISc) for creating course contents in engineering and science. NPTEL as a project originated from many deliberations between IITs, Indian Institutes of Management (IIMs) and Carnegie Mellon University (CMU) during the years 1999-2003. A proposal was jointly put forward by five IITs (Bombay, Delhi, Kanpur, Kharagpur and Madras) and IISc for creating contents for 100 courses as web based supplements and 100 complete video courses, for forty hours of duration per course. Web supplements were expected to cover materials that could be delivered in approximately forty hours. Five engineering branches (Civil, Computer Science, Electrical, Electronics and Communication and Mechanical) and core science programmes that all engineering students are required to take in their undergraduate engineering programme in India were chosen initially. Contents for the above courses were based on the model curriculum suggested by All India Council for Technical Education (AICTE) and the syllabi of major affiliating Universities in India.

#### **HOW TO USE**

**NPTEL** videos are very helpful for students who genuinely wish to understand the topics under the B.Tech subjects taught at IITs. It is also a quick way to prepare just before the exam date. They are easy to understand, good in quality and to the point. It saves a lot of crucial time.

Click Here:- <a href="http://nptel.ac.in/">http://nptel.ac.in/</a>

#### **DETAILS OF NPTEL COURSES**

Aerospace Engineering	Chemical Engineering	Environmental Science	Mining Engineering
Agriculture	Chemistry and Biochemistry	General	Nanotechnology
Architecture	Civil Engineering	Humanities and Social Sciences	Ocean Engineering
Atmospheric Science	Computer Science and Engineering	Management	Physics
Automobile Engineering	Electrical Engineering	<u>Mathematics</u>	Textile Engineering
Basic courses(Sem 1 and 2)	Electronics & Communication Engineering	Mechanical Engineering	
Biotechnology	Engineering Design	Metallurgy and Material Science	



# On Line Courses Repository of NPTEL Electronics and Communications Engineering (ECE)

Following are the links to online courses available through (MOOC Coursera). This list is prepared by Mr.Vikram Singh Rathore from IIIT Kota, Central Library for self-learning of B.Tech students of Electronics and Communications Engineering (ECE), The Online courses Repository is covered with no of 3500 (**Three Thousand Five Hundred**) Lecture/Topic in 94 (**Ninty Four**) courses of ECE.

#### **Electronics and Communications Engineering (ECE)**

S.NO	COURCES	WEB LINK FOR ACCESS
1. •	CMOS Analog VLSI Design	http://nptel.ac.in/courses/117101105/
•	Prof. A.N. Chandorkar ,IIT Bombay	
2.	Advanced Logic Synthesis Dhiraj Taneja ,IIT Madras	http://nptel.ac.in/courses/117106109/
3.	Advanced Optical Communication Prof. R.K. Shevgaonkar ,IIT Bombay	http://nptel.ac.in/courses/117101002/
4.	Advanced VLSI Design Prof. A.N. Chandorkar, Prof. Virendra Singh Prof. Sachin Patkar, Prof. D.K. Sharma , IIT Bombay	http://nptel.ac.in/courses/117101004/
5.	Analog CircuitsRoorkee  Dr. Pramod Agarwal ,IIT Roorkee	http://nptel.ac.in/courses/117107094/
6.	Analog Circuits Prof. A.N. Chandorkar ,IIT Bombay	http://nptel.ac.in/courses/117101106/
7	Analog Circuits and Systems 1 Prof. K. Radhakrishna Rao ,IISc Bangalor	http://nptel.ac.in/courses/117108107/
8.	Analog IC Design Dr. Nagendra Krishnapura ,IIT Mad <i>ras</i>	http://nptel.ac.in/courses/117106030/
9.	Adv. Digital Signal Processing - Multirate and wavelets Prof. V.M. Gadre ,IIT Bombay	http://nptel.ac.in/courses/117101001/
10	Adaptive Signal Processing Prof. Mrityunjoy Chakraborty ,IIT Kharagpur	http://nptel.ac.in/courses/117105075/
11	Advanced 3G and 4G Wireless Mobile Communications Prof. Aditya K. Jagannatham ,IIT Kanpur	http://nptel.ac.in/courses/117104099/
12	Advanced Antenna Theory Dr. Amalendu Patnaik ,IIT Roorkee	http://nptel.ac.in/courses/117107035/
13.	ARM Based Development S.Chandramouleeswaran ,IIT Madras	http://nptel.ac.in/courses/117106111/
14.	Basic Electronics Dr. Pramod Agarwal ,IIT Roorkee	http://nptel.ac.in/courses/117107095/
15.	Basic Electronics Prof. Chitralekha Mahanta ,IIT Guwahati	http://nptel.ac.in/courses/117103063/

16.	Biophotonics Dr. Manoj Varma ,IISc Bangalore	http://nptel.ac.in/courses/117108037/
17.	<u>Communication Engineering</u> Prof. Surendra Prasad ,IIT Delhi	http://nptel.ac.in/courses/117102059/
18.	Broadband Networks: Concepts and Technology Prof. Abhay Karandikar ,IIT Bombay	http://nptel.ac.in/courses/117101050/
19.	Circuits for Analog System Design Prof. M.K. Gunasekaran ,IISc Bangalor	http://nptel.ac.in/courses/117108038/
20.	Coding Theory Dr. Andrew Thangaraj ,IIT Madras	http://nptel.ac.in/courses/117106031/
21.	Communication Networks and Switching Prof. S.L. Maskara ,IIT Kharagpur	http://nptel.ac.in/courses/117105076/
22.	<u>Digital Circuits</u> Prof. Roy Paily Palanthinkal Prof. Anil Mahanta ,IIT Guwahati	http://nptel.ac.in/courses/117103064/
23.	<u>Digital Circuits and Systems</u> Prof. S. Srinivasan ,IIT Madras	http://nptel.ac.in/courses/117106086/
24.	<u>Digital Communication</u> Prof. Saswat Chakrabarti Prof. R.V. Rajakumar ,IIT Kharagpur	http://nptel.ac.in/courses/117105077/
25.	<u>Digital Communication</u> Prof. Bikash Kumar Dey ,IIT Bomb <i>ay</i>	http://nptel.ac.in/courses/117101051/
26.	Digital Switching Prof. Yatindra N Singh ,IIT Kanpur	http://nptel.ac.in/courses/117104104/
27.	Digital System design with PLDs and FPGAs Prof. Kuruvilla Varghese ,IISc Bangalor	http://nptel.ac.in/courses/117108040/
28.	Digital Systems Design Prof. D. Roychoudhury ,IIT Kharagpur	http://nptel.ac.in/courses/117105080/
29.	Digital Video Signal Processing Prof. Sumana Gupta ,IIT Kanpur	http://nptel.ac.in/courses/117104020/
30.	Digital Voice & Picture Communication Prof. Somnath Sengupta ,IIT Kharagpur	http://nptel.ac.in/courses/117105081/
31.	Digital Computer Organization Prof. P.K. Biswas ,IIT Kharagpur	http://nptel.ac.in/courses/117105078/
32.	Digital Image Processing Prof. P.K. Biswas ,IIT Kharagpur	http://nptel.ac.in/courses/117105079/
33.	Digital Image Processing Prof. Sumana Gupta ,IIT Kanpur	http://nptel.ac.in/courses/117104069/
34.	<u>Digital Signal Processing</u> Prof. S.C. Dutta Roy ,IIT Delhi	http://nptel.ac.in/courses/117102060/
35.	<u>Digital Signal Processing</u> Prof. Govind Sharma ,IIT Kanpur	http://nptel.ac.in/courses/117104070/
36.	Electronics for Analog Signal Processing – I Prof. K. Radhakrishna Rao ,IIT Madras	http://nptel.ac.in/courses/117106087/
37.	IC Technology Prof. Indrajit Chakraborty Prof. Roy Paily Palanthinkal ,IIT Guwahati	http://nptel.ac.in/courses/117103066/
38.	Information Theory and Coding Prof. S.N. Merchant ,IIT Bombay	http://nptel.ac.in/courses/117101053/

39.	Information Theory and Coding Prof. Pavan S Nuggehalli ,IISc Bangalor	http://nptel.ac.in/courses/117108097/
40.	<u>Linux Programming &amp; Scripting</u> Anand Iyer ,IIT Madras	http://nptel.ac.in/courses/117106113/
41	<u>MEMS and Microsystems</u> Prof. Santiram Kal ,IIT Kharagpur	http://nptel.ac.in/courses/117105082/
42.	Electronics for Analog Signal Processing – II Prof. K. Radhakrishna Rao ,IIT Madras	http://nptel.ac.in/courses/117106088/
43.	Error Correcting Codes Prof. P. Vijay Kumar ,IISc Bangalore	http://nptel.ac.in/courses/117108044/
44.	Embedded Software Testing MADHUKESHWARA H M ,IIT Madras	http://nptel.ac.in/courses/117106112/
45.	High Speed Devices and Circuits Prof. K.N. Bhat ,IIT Madras	http://nptel.ac.in/courses/117106089/
46.	High Speed Semiconductor Devices Prof. Anjan Ghosh ,IIT Kanpur	http://nptel.ac.in/courses/117104071/
47.	IC Technology Prof. Indrajit Chakraborty Prof. Roy Paily Palanthinkal ,IIT Guwahati	http://nptel.ac.in/courses/117103066/
48	Adv. Digital Signal Processing - Multirate and wavelets Prof. V.M. Gadre ,IIT Bombay	http://nptel.ac.in/courses/117101001/
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54	NOC:Error control coding: An introduction to linear block code Dr. Adrish Banerjee ,IIT Kanpur	http://nptel.ac.in/courses/117104121/
55	NOC:Foundations of Wavelets and Multirate Digital Signal Processing Prof. V.M. Gadre ,IIT Bombay	http://nptel.ac.in/courses/117101123/
56	NOC:Fundamentals of MIMO Wireless Communication Prof. Suvra Sekhar Das ,IIT Kharagpur	http://nptel.ac.in/courses/117105132/
57	NOC:Microwave Integrated Circuits Prof. Jayanta Mukherjee ,IIT Bombay	http://nptel.ac.in/courses/117101119/
58	NOC:Millimeter Wave Technology Prof. Mrinal Kanti Mandal ,IIT Kharagpur	http://nptel.ac.in/courses/117105139/
59	NOC:Digital Switching – I Prof. Yatindra N Singh ,IIT Kanpur	http://nptel.ac.in/courses/117104128/

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63	NOC:Estimation for Wireless Communications - MIMO/ OFDM Cellular and Sensor Networks(Course sponsored by Aricent) Prof. Aditya K. Jagannatham ,IIT Kanpur	http://nptel.ac.in/courses/117104118/
64	NOC:Error control coding: An introduction to linear block code Dr. Adrish Banerjee ,IIT Kanpur	http://nptel.ac.in/courses/117104121/
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66	NOC:Optical communications Dr. Pradeep Kumar K ,IIT Kanpur	http://nptel.ac.in/courses/117104127/
67	NOC:Satellite Communication Systems Prof. Kalyankumar Bandyopadhya, IIT Kharagpur	http://nptel.ac.in/courses/117105131/
68	NOC:Probability and Random Variables/ Processes for Wireless Communications Prof. Aditya K. Jagannatham ,IIT Kanpur	http://nptel.ac.in/courses/117104117/
69	NOC:Spread Spectrum Communications and Jamming Prof. Debarati Sen ,IIT Kharagpur	http://nptel.ac.in/courses/117105136/
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71	Optical Communication Prof. R.K. Shevgaonkar Prof. D.K. Ghosh ,IIT Bombay	http://nptel.ac.in/courses/117101054/
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79	Signal Detection and Estimation Theory Dr. R. Sinha ,IIT Guwahati	http://nptel.ac.in/courses/117103018/
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83	<u>Transmission Lines and EM Waves</u> Prof. R.K. Shevgaonkar ,IIT Bombay	http://nptel.ac.in/courses/117101056/
84	<u>Transmission Lines and EM Waves</u> Prof. R.K. Shevgaonkar ,IIT Bombay	http://nptel.ac.in/courses/117101057/
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91	VLSI Data Conversion Circuits Dr. Shanthi Pavan ,IIT Madras	http://nptel.ac.in/courses/117106034/
92	<u>VLSI Design</u> Prof. A.N. Chandorkar ,IIT Bombay	http://nptel.ac.in/courses/117101058/
93	VLSI Technology Dr. Nandita Dasgupta ,IIT Madras	http://nptel.ac.in/courses/117106093/
94	<u>Wireless Communication</u> Prof. Ranjan Bose ,IIT Delhi	http://nptel.ac.in/courses/117102062/

### **For More Infromation Please Contact**

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