

LIST OF COURSES OFFERED IN JANUARY TO APRIL 2017

For more details and enroll for the courses please goto: <https://onlinecourses.nptel.ac.in/explorer>

COURSES STARTED ON JANUARY 23, 2017

S. No.	Discipline	Course Title	Faculty	Institute	Course Duration	Timeline
1	Aerospace Engineering	Introduction To Experiments In Flight	A.K.Ghosh	IIT Kanpur	4 Weeks	Jan-Feb
2	Aerospace Engineering	Introduction To Airplane Performance	A.K. Ghosh	IIT Kanpur	8 Weeks	Jan-Mar
3	Aerospace Engineering	Engineering Thermodynamics	Jayant K. Singh	IIT Kanpur	8 weeks	Jan-Mar
4	Applied Mechanics	Engineering Mechanics:Statics And Dynamics	Mahesh Panchagnula	IIT Madras	8 weeks	Jan-Mar
5	Architecture	Housing Policy & Planning	Uttam Kumar Roy	IIT Roorkee	8 weeks	Jan-Mar
6	Architecture	Visual Semiotics For Visual Communication	Mainak Ghosh	IIT Kharagpur	4 weeks	Jan-Feb
7	Biological Sciences	Human Molecular Genetics	S. Ganesh	IIT Kanpur	4 Weeks	Jan-Feb
8	Biological Sciences	Functional Genomics	S. Ganesh	IIT Kanpur	4 Weeks	Jan-Feb
9	Biological Sciences	Bioenergy	Mainak Das	IIT Kanpur	8 weeks	Jan-Mar
10	Biotechnology	Downstream Processing	Mukesh Doble	IIT Madras	12 weeks	Jan-Apr
11	Biotechnology	Introduction To Dynamical Models In Biology	Biplab Bose	IIT Guwahati	4 weeks	Jan-Feb
12	Biotechnology	Bioreactors	Gk Suraishkumar	IIT Madras	4 weeks	Jan-Feb
13	Biotechnology	Introduction To Biostatistics	Shamik Sen	IIT Bombay	8 weeks	Jan-Mar
14	Biotechnology	Medical Biomaterials	Mukesh Doble	IIT Madras	8 weeks	Jan-Mar
15	Chemical Engineering	Computational Fluid Dynamics	Srinivas Jayanti	IIT Madras	12 weeks	Jan-Apr

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16	Chemical Engineering	Transport Processes I: Heat And Mass Transfer	V. Kumaran	IISc Bangalore	12 weeks	Jan-Apr
17	Chemical Engineering	Applied Time-Series Analysis	Arun K Tangirala	IIT Madras	12 weeks	Jan-Apr
18	Chemical Engineering	Atomic And Molecular Absorption Spectrometry For Pollution Monitoring	J R Mudakavi	IISc Bangalore	8 weeks	Jan-Mar
19	Chemical Engineering	Waste To Energy Conversion	P. Mondal	IIT Roorkee	8 weeks	Jan-Mar
20	Chemistry	Mathematics For Chemistry	Madhav Ranganathan	IIT Kanpur	8 weeks	Jan-Mar
21	Chemistry	Chemistry I: Introduction To Quantum Chemistry And Molecular Spectroscopy	Mangal Sunder	IIT Madras	8 weeks	Jan-Mar
22	Chemistry	Quantum Computing	Debabrata Goswami	IIT Kanpur	12 weeks	Jan-Apr
23	Civil Engineering	Geosynthetics And Reinforced Soil Structures	K.Rajagopal	IIT Madras	12 weeks	Jan-Apr
24	Civil Engineering	Life Cycle Assessment	Brajesh Kumar Dubey	IIT Kharagpur	8 weeks	Jan-Mar
25	Civil Engineering	Hydration, Porosity And Strength Of Cementitious Materials	Sudhir Misra & K.V. Harish	IIT Kanpur	8 weeks	Jan-Mar
26	Computer Science and Engineering	Internetwork Security	Sourav Mukhopadhyay	IIT Kharagpur	12 weeks	Jan-Apr
27	Computer Science and Engineering	Natural Language Processing	Pawan Goyal	IIT Kharagpur	12 weeks	Jan-Apr
28	Computer Science and Engineering	AI: Knowledge Representation And Reasoning	Deepak Khemani	IIT Madras	12 weeks	Jan-Apr
29	Computer Science and Engineering	Embedded Systems Design	Anupam Basu	IIT Kharagpur	12 weeks	Jan-Apr

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30	Computer Science and Engineering	Introduction To Modern Application Development	Gaurav Raina And Tanmai G	IIT Madras	8 weeks	Jan-Feb
31	Computer Science and Engineering	Wireless Ad Hoc And Sensor Networks	Sudip Misra	IIT Kharagpur	8 weeks	Jan-Mar
32	Computer Science and Engineering	Information Security-3	Kamakoti Veezhinathan	IIT Madras	8 weeks	Jan-Mar
33	Computer Science and Engineering	Design And Analysis Of Algorithms	Madhavan Mukund	CMI	8 weeks	Jan-Mar
34	Computer Science and Engineering	Programming, Data Structures And Algorithms Using Python	Madhavan Mukund	CMI	8 weeks	Jan-Mar
35	Computer Science and Engineering	Introduction To Haskell Programming	S.P.Suresh	CMI	8 weeks	Jan-Mar
36	Computer Science and Engineering	Ai:Constraint Satisfaction	Deepak Khemani	IIT Madras	8 weeks	Jan-Mar
37	Computer Science and Engineering	Vlsi Physical Design	Indranil Sengupta	IIT Kharagpur	12 weeks	Jan-Apr
38	Computer Science and Engineering	Computer Architecture	Smruti R.Sarangi	IIT Delhi	12 weeks	Jan-Apr
39	Computer Science and Engineering	Introduction to Machine Learning	Prof. Balaraman Ravindran	IIT Madras	12 weeks	Jan-Apr
40	Earth Sciences	Earth Sciences For Civil Engineering - Part 2	Javed N. Malik	IIT Kanpur	4 weeks	Jan-Feb
41	Electrical Engineering	Basic Electronics	Mahesh B. Patil	IIT Bombay	12 weeks	Jan-Apr
42	Electrical Engineering	Antennas	Girish Kumar	IIT Bombay	12 weeks	Jan-Apr
43	Electrical Engineering	Foundations Of Wavelets And Multirate Digital Signal Processing	V.M.Gadre	IIT Bombay	4 weeks	Jan-Feb

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44	Electrical Engineering	Principles Of Communication Systems - Part 1	Aditya Jagannatham	IIT Kanpur	8 weeks	Jan-Mar
45	Electrical Engineering	An Introduction To Coding Theory	Adrish Banerjee	IIT Kanpur	8 weeks	Jan-Mar
46	Electrical Engineering	Probability And Random Variables/ Processes For Wireless Communications	Aditya K. Jagannatham	IIT Kanpur	4 weeks	Jan-Feb
47	Electrical Engineering	Fundamentals Of Wavelets, Filter Banks And Time Frequency Analysis	V.M.Gadre	IIT Bombay	8 weeks	Jan-Mar
48	Electrical Engineering	Analog Circuits	Jayanta Mukherjee	IIT Bombay	8 weeks	Jan-Mar
49	Electronics & Communication Engineering	Spread Spectrum Communications And Jamming	Debarati Sen	IIT Kharagpur	12 weeks	Jan-Apr
50	Electronics & Communication Engineering	Digital Vlsi Testing	Santanu Chattopadhyay	IIT Kharagpur	12 weeks	Jan-Apr
51	Electronics & Communication Engineering	Millimeter Wave Technology	Mrinal Kanti Mandal	IIT Kharagpur	8 weeks	Jan-Mar
52	General	Outcome Based Pedagogic Principles For Effective Teaching	Shyamal Kumar Das Mandal, Dr. Tamali Bhattacharyya	IIT Kharagpur	4 weeks	Jan-Feb
53	Humanities and Social Sciences	Indian Philosophy	Satya Sundar Sethy	IIT Madras	12 weeks	Jan-Apr
54	Humanities and Social Sciences	English Language For Competitive Exams	Aysha Iqbal	IIT Madras	12 weeks	Jan-Apr
55	Humanities and Social Sciences	Basic Calculus For Engineers, Scientists And Economists	Joydeep Dutta	IIT Kanpur	4 weeks	Jan-Feb

S. No.	Discipline	Course Title	Faculty	Institute	Course Duration	Timeline
56	Humanities and Social Sciences	Ethics	Sreekumar Nellickapilly	IIT Madras	4 weeks	Jan-Feb
57	Humanities and Social Sciences	Depreciation, Alternate Investment And Profitability Analysis	Bikash Mohanty	IIT Roorkee	4 weeks	Jan-Feb
58	Humanities and Social Sciences	Infrastructure Economics	Nalin Bharti	IIT Patna	8 weeks	Jan-Mar
59	Humanities and Social Sciences	Language And Mind	Rajesh Kumar	IIT Madras	8 weeks	Jan-Mar
60	Humanities and Social Sciences	Literary Theory And Literary Criticism	Aysha Iqbal	IIT Madras	8 weeks	Jan-Mar
61	Humanities and Social Sciences	Enhancing Soft Skills And Personality	T. Ravichandran	IIT Kanpur	8 weeks	Jan-Mar
62	Humanities and Social Sciences	Postcolonial Literature	Sayan Chattopadhyay	IIT Kanpur	4 weeks	Jan-Feb
63	Humanities and Social Sciences	Emotional Intelligence	Rabindra Kumar Pradhan	IIT Kharagpur	8 weeks	Jan-Mar
64	Humanities and Social Sciences	Health Research Fundamentals	Dr. Sanjay Mehendale Dr. Manoj V Murhekar Dr. R Ramakrishnan Dr. Tarun Bhatnagar Dr. Prabhdeep Kaur Dr. P. Manickam Dr. P GaneshKumar	IIT Madras	8 weeks	Jan-Mar
65	Industrial Management & Engineering	Project Management	Raghunandan Sengupta	IIT Kanpur	8 weeks	Jan-Mar
66	Industrial Management & Engineering	Systems Engineering: Theory & Practice	Dr. Deepu Philip	IIT Kanpur	8 weeks	Jan-Mar

S. No.	Discipline	Course Title	Faculty	Institute	Course Duration	Timeline
67	Management	Business Ethics	Susmita Mukhopadhyay	IIT Kharagpur	12 weeks	Jan-Apr
68	Management	Financial Statement Analysis And Reporting	Anil K. Sharma	IIT Roorkee	12 weeks	Jan-Apr
69	Management	Consumer Behaviour	Srabanti Mukherjee	IIT Kharagpur	8 weeks	Jan-Mar
70	Management	Foundation Course In Managerial Economics	Barnali Nag	IIT Kharagpur	8 weeks	Jan-Mar
71	Management	Knowledge Management	K B L Srivastava	IIT Kharagpur	8 weeks	Jan-Mar
72	Management	Services Marketing: A Practical Approach	Biplab Datta	IIT Kharagpur	4 weeks	Jan-Feb
73	Management	Introduction To Operations Research	G.Srinivasan	IIT Madras	8 weeks	Jan-Mar
74	Management	Strategy: An Introduction To Game Theory	Aditya K. Jagannatham & Vimal Kumar	IIT Kanpur	8 weeks	Jan-Mar
75	Management	Six Sigma	Jitesh J Thakkar & Tapan Bagchi	IIT Kharagpur	12 weeks	Jan-Apr
76	Management	Principles Of Human Resource Management	Aradhana Malik	IIT Kharagpur	8 weeks	Jan-Mar
77	Material Science & Engineering	Fundamentals Of Material Processing - Part 2	Shashank Shekhar & Dr. Anshu Gaur	IIT Kanpur	8 weeks	Jan-Mar
78	Mathematics	Introductory Course In Real Analysis	P D Srivastava	IIT Kharagpur	12 weeks	Jan-Apr
79	Mathematics	Linear Algebra	Dilip P. Patil	IISc Bangalore	12 weeks	Jan-Apr
80	Mathematics	Introduction To Commutative Algebra	A.V.Jayanthan	IIT Madras	12 weeks	Jan-Apr
81	Mathematics	Mathematical Methods And Its Applications	P.N. Agarwal	IIT Roorkee	12 weeks	Jan-Apr

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82	Mathematics	Modeling Transport Phenomena Of Microparticles	S Bhattacharyya & Gp Raja Sekhar	IIT Kharagpur	8 weeks	Jan-Mar
83	Mathematics	Probability And Statistics	Somesh Kumar	IIT Kharagpur	12 weeks	Jan-Apr
84	Mathematics	Stochastic Processes	S. Dharmaraja	IIT Delhi	12 weeks	Jan-Apr
85	Mathematics & Statistics	Linear Regression Analysis And Forecasting	Shalabh	IIT Kanpur	4 weeks	Jan-Feb
86	Mechanical Engineering	Compliant Mechanisms: Principles And Design	G. K. Ananthasuresh	IISc Bangalore	12 weeks	Jan-Apr
87	Mechanical Engineering	Manufacturing Process Technology I & II	Shantanu Bhattacharya	IIT Kanpur	12 weeks	Jan-Apr
88	Mechanical Engineering	Principles Of Vibration Control	Bishakh Bhattacharya	IIT Kanpur	4 weeks	Jan-Feb
89	Mechanical Engineering	Heat Transfer And Combustion In Multiphase Systems	Saptarshi Basu	IISc Bangalore	8 weeks	Jan-Mar
90	Mechanical Engineering	Introduction To Mechanical Vibration	Anil Kumar	IIT Roorkee	8 weeks	Jan-Mar
91	Mechanical Engineering	Joining Technologies Of Commercial Importance	Dheerendra Kumar Dwivedi	IIT Roorkee	8 weeks	Jan-Mar
92	Mechanical Engineering	Modelling And Simulation Of Dynamic Systems	Pushparaj Mani Pathak	IIT Roorkee	8 weeks	Jan-Mar
93	Mechanical Engineering	Principles Of Casting Technology	Pradeep Kumar Jha	IIT Roorkee	8 weeks	Jan-Mar
94	Mechanical Engineering	Steam And Gas Power Systems	Ravi Kumar	IIT Roorkee	8 weeks	Jan-Mar
95	Mechanical Engineering	Fundamentals Of Acoustics	Nachiketa Tiwari	IIT Kanpur	12 weeks	Jan-Apr
96	Mechanical Engineering	Basics Of Noise And Its Measurements	Nachiketa Tiwari	IIT Kanpur	8 weeks	Jan-Mar

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97	Mechanical Engineering	Introduction To Fluid Mechanics	Suman Chakraborty	IIT Kharagpur	12 weeks	Jan-Apr
98	Mechanical Engineering	Non Traditional Abrasive Machining Processes- Ultrasonic, Abrasive Jet And Abrasive Water Jet Machining	Asimava Roy Choudhury	IIT Kharagpur	4 weeks	Jan-Feb
99	Metallurgy and Material Science	Defects In Materials	Sundararaman M	IIT Madras	12 weeks	Jan-Apr
100	Metallurgy and Material Science	Surface Engineering Of Nanomaterials	Kaushik Pal	IIT Roorkee	8 weeks	Jan-Mar
101	Metallurgy and Material Science	Analysis And Modeling Of Welding	Gandham Phanikumar	IIT Madras	8 weeks	Jan-Mar
102	Metallurgy and Material Science	Fundamentals Of Electronic Materials And Devices	Parasuraman Swaminathan	IIT Madras	8 weeks	Jan-Mar
103	Metallurgy and Material Science	Material Characterization	Sankaran.S	IIT madras	12 weeks	Jan-Apr
104	Multidisciplinary	Matlab Programming For Numerical Computation	Niket Kaisare	IIT Madras	8 weeks	Jan-Mar
105	Multidisciplinary	Introduction To Research	Prathap Haridoss	IIT Madras	8 weeks	Jan-Mar
106	Ocean Engineering	Offshore Structures Under Special Loads Including Fire Resistance	Srinivasan Chandrasekaran	IIT Madras	12 weeks	Jan-Apr
107	Ocean Engineering	Hse Practices For Offshore And Petroleum Industries	Srinivasan Chandrasekaran	IIT Madras	12 weeks	Jan-Apr
108	Physics	Fiber Optics	Vipul Rastogi	IIT Roorkee	8 weeks	Jan-Mar
109	Physics	Computational Science And Engineering Using Python	Mahendra Verma	IIT Kanpur	8 weeks	Jan-Mar

COURSES STARTING FROM FEBRUARY 20, 2017

S. No.	Discipline	Course Title	Faculty	Institute	Course Duration	Timeline
1	Aerospace Engineering	Introduction To Ancient Indian Technology	D.P.Mishra	IIT Kanpur	8 weeks	Feb-Apr
2	Architecture	Landscape Architecture And Site Planning - Basic Fundamentals	Uttam Kumar Bannerjee	IIT Kharagpur	8 weeks	Feb-Apr
3	Biotechnology	Introduction to Proteomics	Prof.Sanjeeva Srivastava	IIT Bombay	8 weeks	Feb-Apr
4	Biotechnology	Interactomics	Prof.Sanjeeva Srivastava	IIT Bombay	8 weeks	Feb-Apr
5	Civil Engineering	Digital Land Surveying and Mapping(DLS&M)	Jayanta Kumar Ghosh	IIT Roorkee	8 weeks	Feb-Apr
6	Computer Science and Engineering	Programming In C++	Partha Pratim Das	IIT Kharagpur	8 weeks	Feb-Apr
7	Electrical Engineering	Medical Image Analysis	Debdoot Sheet	IIT Kharagpur	4 weeks	Feb-Mar
8	Electronics & Communication Engineering	Design Principles Of Rf And Microwave Filters And Amplifiers	Amitava Bhattacharya	IIT Kharagpur	4 weeks	Feb- Mar
9	General	Introduction to Remote Sensing	Arun K. Saraf	IIT Roorkee	4 weeks	Feb-Mar
10	Humanities and Social Science	Speaking Effectively	Anjali Gera Roy	IIT Kharagpur	8 weeks	Feb-Apr
11	Humanities and Social Science	Great Experiments In Psychology	Rajlakshmi Guha	IIT Kharagpur	4 weeks	Feb-Mar
12	Humanities and Social Sciences	Qualitative Research Methods	Aradhna Malik	IIT Kharagpur	8 weeks	Feb-Apr
13	Management	Supply Chain Analytics	Rajat Agrawal	IIT Roorkee	8 weeks	Feb-Apr

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14	Mechanical Engineering	Convective Heat Transfer	Arup Kumar Das	IIT Roorkee	4 weeks	Feb-Mar
15	Mechanical Engineering	Product design and development	Indradeep singh	IIT Roorkee	4 weeks	Feb-Mar
16	Physics	Introductory Quantum Mechanics	Manoj Harbola	IIT Kanpur	8 weeks	Feb-Apr
17	Humanities and Social Science	Introducing Modern Western Art: Movements and Artists	Prof. Soumik Nandi Majumdar	IIT Kanpur	4 weeks	Feb-Mar