

S.no	Course Id	Course Name	SME Name	Institute	Course Period	Duration
1	noc17-ae05	Gas dynamics	Prof. Sameen. A	IIT Madras	Jul-Oct 2017	12 weeks
2	noc17-ae06	Engineering Thermodynamics	Prof. D. P. Mishra	IIT Kanpur	Jul-Oct 2017	12 weeks
3	noc17-ae07	Combustion in air breathing aero engines	Prof. Swetaprovo Chaudhuri	IISc Bangalore	Jul-Oct 2017	12 weeks
4	noc17-ae08	Aircraft Design	Prof. A.K.Ghosh	IIT Kanpur	Jul-Oct 2017	12 weeks
5	noc17-ae09	Aircraft Stability and Control	Prof. A.K.Ghosh	IIT Kanpur	Jul-Oct 2017	12 weeks
6	noc17-ag01	Momentum transfer in process engineering	Prof. Tridib Kumar Goswami	IIT Kharagpur	Jul-Oct 2017	12 weeks
7	noc17-bt13	Biostatistics and design of experiments	Prof. Mukesh Doble	IIT Madras	Jul-Sep 2017	8 weeks
8	noc17-bt17	Biomedical nanotechnology	Prof. P.Gopinath	IIT Roorkee	Jul-Aug 2017	4 weeks
9	noc17-bt18	Introduction to mechanobiology	Prof. Shamik Sen	IIT Bombay	Aug-Oct 2017	8 weeks
10	noc17-bt20	Animal Physiology	Prof. Mainak Das	IIT Kanpur	Jul-Oct 2017	12 weeks
11	noc17-bt21	Cell Culture Technologies	Prof. Mainak Das	IIT Kanpur	Aug-Oct 2017	8 weeks
12	noc17-bt22	Forest Biometry	Dr. Ankur Awadhiya, Prof. Mainak Das	IIT Kanpur	Aug-Oct 2017	8 weeks
13	noc17-bt23	Industrial Biotechnology	Prof. Debabrata Das	IIT Kharagpur	Jul-Oct 2017	12 weeks
14	noc17-ce07	Computational hydraulics	Prof. Anirban Dhar	IIT Kharagpur	Jul-Oct 2017	12 weeks
15	noc17-ce11	Geotechnical engineering laboratory	Prof. J. N. Mandal	IIT Bombay	Jul-Aug 2017	4 weeks
16	noc17-ce16	Project planning and control	Prof. Koshy Varghese	IIT Madras	Jul-Sep 2017	8 weeks
17	noc17-ce17	Mechanics of Solids	Prof. Priyanka Ghosh	IIT Kanpur	Jul-Oct 2017	12 weeks
18	noc17-ce18	Principles of Construction Management	Prof. Sudhir Misra	IIT Kanpur	Aug-Oct 2017	8 weeks
19	noc17-ce19	Foundation Design	-	IIT Kanpur	Jul-Oct 2017	12 weeks
20	noc17-ce20	Integrated Waste Management for a Smart City	Prof. Brajesh Kumar Dubey	IIT Kharagpur	Jul-Oct 2017	12 weeks
21	noc17-ce21	Design of Steel Structures	Prof. Damodar Maiti	IIT Kharagpur	Jul-Oct 2017	12 weeks
22	noc17-ce22	Strength of materials	Prof. Sriman Kumar Bhattacharya	IIT Kharagpur	Jul-Oct 2017	12 weeks
23	noc17-ce23	Design of reinforced concrete structures	Prof. Nirjhar Dhang	IIT Kharagpur	Jul-Oct 2017	12 weeks
24	noc17-ce24	Reinforced Concrete Road Bridges	Prof. Nirjhar Dhang	IIT Kharagpur	Jul-Aug 2017	4 weeks
25	noc17-ce25	Structural Analysis - I	Prof. Amit Shaw	IIT Kharagpur	Jul-Oct 2017	12 weeks

26	noc17-ce26	Digital Image Processing of Remote Sensing Data	Prof. Arun K. Saraf	IIT Roorkee	Jul-Aug 2017	4 weeks
27	noc17-ce27	Geoenvironmental Engineering (Environmental Geotechnology): Landfills, Slurry Ponds & Contaminated Sites	Prof. Manoj Datta	IIT Delhi	Jul-Oct 2017	12 weeks
28	noc17-ch07	Trace And Ultratrace Element Determination Of Metal Ions By Atomic Absorption Spectrometry	Prof. J. R. Mudakavi	IISc Bangalore	Jul-Sep 2017	8 weeks
29	noc17-ch08	Introduction to evolutionary dynamics	Prof. Supreet Saini	IIT Bombay	Jul-Sep 2017	8 weeks
30	noc17-ch10	Phase equilibrium thermodynamics	Prof. Gargi Das	IIT Kharagpur	Jul-Sep 2017	8 weeks
31	noc17-ch11	Transport phenomena	Prof. Sunando Dasgupta	IIT Kharagpur	Jul-Oct 2017	12 weeks
32	noc17-ch12	Unit operations of particulate matter	Prof. Shabina Khanam	IIT Roorkee	Jul-Aug 2017	4 weeks
33	noc17-cs19	Computer architecture and organization	Prof. Indranil Sengupta, Prof. Kamalika Datta	IIT Kharagpur	Jul-Oct 2017	12 weeks
34	noc17-cs20	Introduction to algorithms and analysis	Prof. Sourav Mukhopadhyay	IIT Kharagpur	Jul-Oct 2017	12 weeks
35	noc17-cs21	Hardware modeling using verilog	Prof. Indranil Sengupta	IIT Kharagpur	Aug-Oct 2017	8 weeks
36	noc17-cs22	Introduction to Internet of Things	Prof. Sudip Misra	IIT Kharagpur	Jul-Oct 2017	12 weeks
37	noc17-cs23	Cloud computing	Prof. Soumya Kanti Ghosh	IIT Kharagpur	Aug-Oct 2017	8 weeks
38	noc17-cs24	Programming in C++	Prof. Partha Pratim Das	IIT Kharagpur	Jul-Sep 2017	8 weeks
39	noc17-cs25	Object oriented analysis and design	Prof. Partha Pratim Das	IIT Kharagpur	Jul-Sep 2017	8 weeks
40	noc17-cs26	Introduction to Machine Learning	Prof. Sudeshna Sarkar	IIT Kharagpur	Jul-Sep 2017	8 weeks
41	noc17-cs27	Design and analysis of algorithms	Prof. Madhavan Mukund	Chennai Mathematical Institute	Jul-Sep 2017	8 weeks
42	noc17-cs28	Programming, data structures and algorithms using python	Prof. Madhavan Mukund	Chennai Mathematical Institute	Jul-Sep 2017	8 weeks
43	noc17-cs29	Introduction to operating systems	Prof. Chester Robeiro	IIT Madras	Jul-Sep 2017	8 weeks
44	noc17-cs30	AI: search methods for problem solving	Prof. Deepak Khemani	IIT Madras	Jul-Oct 2017	12 weeks

45	noc17-cs31	Privacy and Security in Online Social Media	Prof. Ponnurangam.K	IIT Delhi	Jul-Oct 2017	8 weeks
46	noc17-cs32	Software testing	Prof. Meenakshi D'souza	IIT Bangalore	Jul-Oct 2017	12 weeks
47	noc17-cs33	Fundamentals of Database Systems	Prof. Arnab Bhattacharya	IIT Kanpur	Jul-Sep 2017	8 weeks
48	noc17-cs34	Theory of Computation	Prof. Raghunath Tewari	IIT Kanpur	Jul-Sep 2017	8 weeks
49	noc17-cs35	Computer Organization and Architecture	Prof. Kamakoti	IIT Madras	Jul-Oct 2017	12 weeks
50	noc17-cs36	Introduction To Cryptology	Prof. S. Gangopadhyay	IIT Roorkee	Jul-Aug 2017	4 weeks
51	noc17-cs37	Introduction to Wireless and Cellular Communications	Prof. David Kovil Pillai	IIT Madras	Jul-Oct 2017	12 weeks
52	noc17-cs38	Model Checking	Prof. B.Srivathsan	Chennai Mathematical Institute	Jul-Oct 2017	12 weeks
53	noc17-cs39	Introduction to Parallel Programming in OpenMP	Prof. Yogish Sabharwal	IIT Delhi	Aug-Sep 2017	4 weeks
54	noc17-cs40	Introduction to Modern Application Development	Prof. Gaurav Raina	IIT Madras	Jul-Sep 2017	8 weeks
55	noc17-cs41	Social Networks	Prof. Sudarshan Iyengar	IIT Ropar	Jul-Oct 2017	12 weeks
56	noc17-cs42	Distributed Systems	Prof. Rajiv Misra	IIT Patna	Aug-Oct 2017	8 weeks
57	noc17-cs43	Introduction to Programming in C	Prof. Satyadev Nandakumar	IIT Kanpur	Jul-Sep 2017	8 weeks
58	noc17-cy01	Basics of Fluorescence Spectroscopy	Prof. Pratik Sen	IIT Kanpur	Jul-Sep 2017	8 weeks
59	noc17-cy03	Analytical chemistry	Prof. Debashis Ray	IIT Kharagpur	Jul-Oct 2017	12 weeks
60	noc17-cy07	Laser: Fundamentals and Applications	Prof. Manabendra Chandra	IIT Kanpur	Aug-Oct 2017	8 weeks
61	noc17-cy09	Chemical and biological thermodynamics: principles to applications	Prof. Nand Kishore	IIT Bombay	Jul-Oct 2017	12 weeks
62	noc17-cy10	Co-ordination chemistry (Chemistry of transition elements)	Prof. Debashis Ray	IIT Kharagpur	Jul-Oct 2017	12 weeks
63	noc17-cy11	Stereochemistry	Prof. Amit Basak	IIT Kharagpur	Jul-Sep 2017	8 weeks
64	noc17-cy12	Advanced Mathematical Methods for Chemistry	Prof. Madhav Ranganathan	IIT Kanpur	Jul-Oct 2017	12 weeks

65	noc17-cy13	Pericyclic Reactions and Organic Photochemistry	Prof. Sankararaman S	IIT Madras	Aug-Oct 2017	8 weeks
66	noc17-ec05	Enclosure design of electronics equipment	Prof. N. V Chalapathi Rao	IISc Bangalore	Jul-Oct 2017	12 weeks
67	noc17-ec06	Design of photovoltaic systems	Prof. L Umanand	IISc Bangalore	Jul-Oct 2017	12 weeks
68	noc17-ec07	Photonic integrated circuits	Prof. T. Srinivas	IISc Bangalore	Jul-Aug 2017	4 weeks
69	noc17-ec08	Power system analysis	Prof. Debapriya Das	IIT Kharagpur	Jul-Oct 2017	12 weeks
70	noc17-ec09	Industrial Instrumentation	Prof. Alok Barua	IIT Kharagpur	Jul-Oct 2017	12 weeks
71	noc17-ec10	Electrical machines - I	Prof. D Kastha, Prof. Suman Maiti	IIT Kharagpur	Jul-Oct 2017	12 weeks
72	noc17-ec11	Analog communication	Prof. Goutam Das	IIT Kharagpur	Jul-Oct 2017	12 weeks
73	noc17-ec12	Modern digital communication techniques	Prof. Suvra Sekhar Das	IIT Kharagpur	Jul-Oct 2017	12 weeks
74	noc17-ec13	Digital speech processing	Prof. Shyamal Kumar Das Mandal	IIT Kharagpur	Aug-Oct 2017	8 weeks
75	noc17-ec14	Satellite communication	Prof. Kalyan Kumar Bandyopadhyay	IIT Kharagpur	Aug-Oct 2017	8 weeks
76	noc17-ec15	Analog Circuits and Systems through SPICE Simulation	Prof. Mrigank Sharad	IIT Kharagpur	Jul-Oct 2017	12 weeks
77	noc17-ec16	An Introduction to Information Theory	Prof. Adrish Banerjee	IIT Kanpur	Jul-Sep 2017	8 weeks
78	noc17-ee11	Optimal control	Prof. Barjeev Tyagi	IIT Roorkee	Jul-Sep 2017	8 weeks
79	noc17-ee12	Control engineering	Prof. Ramkrishna.P	IIT Madras	Jul-Oct 2017	12 weeks
80	noc17-ee13	Basic electrical circuits	Prof. Nagendra Krishnapura	IIT Madras	Jul-Sep 2017	8 weeks
81	noc17-ee14	Analog circuits	Prof. Nagendra Krishnapura	IIT Madras	Jul-Sep 2017	8 weeks
82	noc17-ee15	Networks and systems	Prof. Andrew Thangaraj, Prof.C.S.Ramalingam	IIT Madras	Jul-Oct 2017	12 weeks
83	noc17-ee16	Microwave integrated circuits	Prof. Jayanta Mukherjee	IIT Bombay	Jul-Sep 2017	8 weeks
84	noc17-ee17	Principles of Communication Systems: Part - II	Prof. Aditya K. Jagannatham	IIT Kanpur	Jul-Sep 2017	8 weeks
85	noc17-ee18	Applied Electromagnetics For Engineers	Prof. Pradeep Kumar	IIT Kanpur	Jul-Oct 2017	12 weeks
86	noc17-ee19	Estimation for Wireless Communications:MIMO-OFDM Cellular and Sensor Networks	Prof. Aditya K. Jagannatham	IIT Kanpur	Jul-Sep 2017	8 weeks
87	noc17-ee20	Design for internet of things	Prof. T V Prabhakar	IISc Bangalore	Jul-Sep 2017	8 weeks

88	noc17-ee21	Advances in UHV Transmission and Distribution	Prof Subba Reddy B	IISc Bangalore	Jul-Sep 2017	8 weeks
89	noc17-ee22	Computational Electromagnetics & Applications	Prof. Dr. Krish Sankaran	IIT Madras	Jul-Oct 2017	12 weeks
90	noc17-ge04	Biology for engineers and other non-biologists	Prof. G.K.Suraishkumar, Prof.Madhulika Dixit	IIT Madras	Jul-Aug 2017	4 weeks
91	noc17-ge05	Introduction to research	Prof. Prathap Haridoss	IIT Madras	Jul-Sep 2017	8 weeks
92	noc17-ge06	Health research fundamentals	Multi Faculty	National Institute of Epidemiology	Jul-Sep 2017	8 weeks
93	noc17-ge07	Outcome based pedagogic principles for effective teaching	Prof. Shyamal Kumar Das Mandal and Dr. Tamali Bhattacharyya.	IIT Kharagpur	Jul-Aug 2017	4 weeks
94	noc17-hs02	Soft skills	Prof. Binod Mishra	IIT Roorkee	Jul-Oct 2017	12 weeks
95	noc17-hs19	Technical english for engineers	Prof. Aysha Iqbal	IIT Madras	Jul-Sep 2017	8 weeks
96	noc17-hs20	Literature for Competitive Exams	Prof. Aysha Iqbal	IIT Madras	Jul-Sep 2017	8 weeks
97	noc17-hs21	Applied linguistics	Prof. Rajesh Kumar	IIT Madras	Jul-Oct 2017	12 weeks
98	noc17-hs22	Cognition, Transformation and Lives	Dr. Alok Bajpai	IIT Kanpur	Jul-Aug 2017	4 weeks
99	noc17-hs23	Visual Perception and Art: A Survey Across the Cultures	Prof. Soumik Nandy Majumdar	Visva Bharati University, Santiniketan	Jul-Aug 2017	4 weeks
100	noc17-hs24	Introduction to Basic Cognitive Processes	Prof. ARK Verma	IIT Kanpur	Jul-Sep 2017	8 weeks
101	noc17-hs25	Calculus of One Real Variable	Prof. Joydeep Dutta	IIT Kanpur	Aug-Oct 2017	8 weeks
102	noc17-hs26	Science, Technology and Society	Prof. Sambit Mallick	IIT Guwahati	Jul-Oct 2017	12 weeks
103	noc17-hs27	Gender and Literature	Prof. Avishek Parui	IIT Guwahati	Jul-Sep 2017	8 weeks
104	noc17-hs28	Ecology and Society	Prof. Ngamjahao Kipgen	IIT Guwahati	Jul-Oct 2017	12 weeks
105	noc17-hs29	History of English Language and Literature	Prof. Merin Simi Raj	IIT Madras	Jul-Oct 2017	12 weeks
106	noc17-hs30	Introduction to Psychology	Prof. Braj Bhushan	IIT Kanpur	Jul-Sep 2017	8 weeks
107	noc17-hs31	Developing Soft Skills and Personality	Prof. T. Ravichandran	IIT Kanpur	Jul-Sep 2017	8 weeks
108	noc17-hs32	Human Resource Development	Prof. KBL Srivastava	IIT Kharagpur	Jul-Oct 2017	12 weeks
109	noc17-hs33	Educational leadership	Prof. Atasi Mohanty	IIT Kharagpur	Jul-Sep 2017	8 weeks
110	noc17-ma11	Differential equations for engineers	Prof. Srinivasa Manam	IIT Madras	Jul-Oct 2017	12 weeks

111	noc17-ma12	Integral equations, calculus of variations and its applications	Prof. P. N Agarwal, Prof.D. N Pandey	IIT Roorkee	Jul-Oct 2017	12 weeks
112	noc17-ma13	Nonlinear programming	Prof. S. K Gupta	IIT Roorkee	Jul-Aug 2017	4 weeks
113	noc17-ma14	Numerical methods	Prof. Ameeya Kumar Nayak, Prof. Sanjeev Kumar	IIT Roorkee	Jul-Sep 2017	8 weeks
114	noc17-ma15	Measure theory	Prof. Inder Kumar Rana	IIT Bombay	Jul-Oct 2017	12 weeks
115	noc17-ma16	Numerical Analysis	Prof. R. Usha	IIT Madras	Jul-Oct 2017	12 weeks
116	noc17-ma17	Introduction to R Software	Prof. Shalabh	IIT Kanpur	Jul-Sep 2017	8 weeks
117	noc17-ma18	Constrained and unconstrained optimization	Prof. A Goswami , Prof.Debjani Chakraborty	IIT Kharagpur	Jul-Oct 2017	12 weeks
118	noc17-ma19	Graph Theory	Prof. Soumen Maity	IISER Pune	Aug-Oct 2017	8 weeks
119	noc17-ma20	Regression analysis	Prof. Soumen Maity	IISER Pune	Jul-Oct 2017	12 weeks
120	noc17-me14	Manufacturing of Composites	Prof. J. Ramkumar	IIT Kanpur	Jul-Sep 2017	8 weeks
121	noc17-me19	Heat Treatment and Surface Hardening - II	Prof. Kallol Mondal , Prof. Sandeep Sangal	IIT Kanpur	Aug-Oct 2017	8 weeks
122	noc17-me20	Phase Transformation in Materials	Prof. Krishanu Biswas	IIT Kanpur	Jul-Oct 2017	12 weeks
123	noc17-me21	Fundamentals of manufacturing processes	Prof. D K Dwivedi	IIT Roorkee	Jul-Oct 2017	12 weeks
124	noc17-me22	Fluid dynamics and turbomachines	Prof. Dhiman Chatterjee, Prof.Shamit Bakshi	IIT Madras	Jul-Sep 2017	8 weeks
125	noc17-me23	Engineering fracture mechanics	Prof. K.Ramesh	IIT Madras	Jul-Oct 2017	12 weeks
126	noc17-me24	Foundation of computational fluid dynamics	Prof. S. Vengadesan	IIT Madras	Jul-Sep 2017	8 weeks
127	noc17-me25	Micro and nano scale energy transport	Prof. Arvind Pattamatta	IIT Madras	Jul-Oct 2017	12 weeks
128	noc17-me26	Applied Ergonomics	Prof. Shantanu Bhattacharya, Prof. A. Gupta	IIT Kanpur	Jul-Oct 2017	12 weeks
129	noc17-me27	Nature and Properties of Materials	Prof. Bishakh Bhattacharya	IIT Kanpur	Jul-Sep 2017	8 weeks
130	noc17-me28	Mathematical Methods in Engineering and Science	Prof. Bhaskar Dasgupta	IIT Kanpur	Jul-Oct 2017	12 weeks
131	noc17-me30	Electron diffraction and imaging	Prof. Sundararaman M	IIT Madras	Jul-Oct 2017	12 weeks
132	noc17-me32	Acoustic and Noise Control	Prof. Abijith Sarkar	IIT Madras	Jul-Oct 2017	12 weeks

133	noc17-me33	Sustainability through Green Manufacturing Systems: An Applied Approach	Prof. Deepu Philip, Dr. Amandeep Singh	IIT Kanpur	Aug-Oct 2017	8 weeks
134	noc17-me35	Modeling and Simulation of Discrete Event Systems	Prof. P. Kumar Jha	IIT Roorkee	Jul-Sep 2017	8 weeks
135	noc17-me36	Processing of Polymers and Polymer Composites	Prof. Inderdeep Singh	IIT Roorkee	Jul-Sep 2017	8 weeks
136	noc17-mg14	Operations and supply chain management	Prof. G.srinivasan	IIT Madras	Jul-Oct 2017	12 weeks
137	noc17-mg15	Patent Law for Engineers and Scientists	Prof. Feroze Ali	IIT Madras	Jul-Oct 2017	12 weeks
138	noc17-mg16	Marketing research and analysis	Prof. J.K.Nayak	IIT Roorkee	Jul-Sep 2017	8 weeks
139	noc17-mg17	Project management for managers	Prof. Mukesh Kumar Barua	IIT Roorkee	Jul-Oct 2017	12 weeks
140	noc17-mg18	Total Quality Management - I	Prof. Raghu Nandan Sengupta	IIT Kanpur	Aug-Oct 2017	8 weeks
141	noc17-mg19	Gender justice and workplace security	Prof. Dipa Dube	IIT Kharagpur	Jul-Aug 2017	4 weeks
142	noc17-mg20	Corporate social responsibility	Prof. Aradhna Malik	IIT Kharagpur	Jul-Sep 2017	8 weeks
143	noc17-mg21	Decision modeling	Prof. Biswajit Mahanty	IIT Kharagpur	Jul-Sep 2017	8 weeks
144	noc17-mg22	E-business	Prof. Mamata Jenamani	IIT Kharagpur	Jul-Oct 2017	12 weeks
145	noc17-mg23	Six sigma	Prof. T. P. Bagchi and Prof. Jitesh J Thakkar	IIT Kharagpur	Jul-Oct 2017	12 weeks
146	noc17-mg24	Introduction to Data Analytics	Prof. Nandan Sudarsanam, Prof. Balaraman Ravindran	IIT Madras	Jul-Sep 2017	8 weeks
147	noc17-mm09	Fundamentals of Material Processing - I	Prof. Shashank Shekhar	IIT Kanpur	Jul-Sep 2017	8 weeks
148	noc17-mm10	Steel Quality : Role of Secondary Refining & Continuous Casting	Prof. Santanu Kr. Ray	IIT Madras	Aug-Oct 2017	8 weeks
149	noc17-mm11	X-ray Crystallography & Diffraction	Prof. Ranjit Kumar Ray	IEST Shibpur	Jul-Oct 2017	12 weeks
150	noc17-mm12	Noise Management & Control	Prof. Nachiketa Tiwari	IIT Kanpur	Jul-Oct 2017	12 weeks
151	noc17-mm13	Manufacturing Systems Technology I & II	Prof. Shantanu Bhattacharya	IIT Kanpur	Jul-Oct 2017	12 weeks
152	noc17-mm14	Refrigeration And Air-Conditioning	Prof. Ravi Kumar	IIT Roorkee	Jul-Sep 2017	8 weeks

153	noc17-mm15	Spur and helical gear cutting	Prof. Asimava Roychoudhury	IIT Kharagpur	Jul-Aug 2017	4 weeks
154	noc17-mm16	Laws of thermodynamics	Prof. S.K Som , Prof.Suman Chakraborty	IIT Kharagpur	Jul-Aug 2017	4 weeks
155	noc17-mm17	Energy conservation and waste heat recovery	Prof. PK Das , Prof. A Bhattacharya	IIT Kharagpur	Jul-Oct 2017	12 weeks
156	noc17-ph05	Quantum Information and Computing	Prof. Dipan Ghosh	IIT Bombay	Jul-Sep 2017	8 weeks
157	noc17-ph06	Mathematical methods in Physics -I	Prof. Samudra Roy	IIT Kharagpur	Jul-Oct 2017	12 weeks
158	noc17-ph07	Classical mechanics: from newtonian to lagrangian formulation	Prof. Debamalya Banerjee	IIT Kharagpur	Jul-Oct 2017	12 weeks
159	noc17-ph08	Solid state physics	Prof. Amal Kumar Das	IIT Kharagpur	Jul-Oct 2017	12 weeks