

NPTEL-II, COURSES TO BE DEVELOPED BY IIT GUWAHATI

Sl No.	Course Title	Discipline	Course Format	Instructor's name & email id
1	Advanced Control Systems	Electrical	Video	Prof. S. Majhi (smajhi@iitg.ernet.in)
2	Digital Control Systems	Electrical	Web	Prof. S. Majhi (smajhi@iitg.ernet.in) & Dr I. Kar (indranik@iitg.ernet.in)
3	Introduction to Hybrid and Electric Vehicles	Electrical	Web	Dr Praveen Kumar (praveen_kumar@iitg.ernet.in) & Prof. S. Majhi (smajhi@iitg.ernet.in)
4	Advanced Digital Communication	Electronics & Communication	Web	Dr P. R. Sahu (prs@iitg.ernet.in)
5	Advanced Mobile Communication	Electronics & Communication	Web	Dr Ratnajit Bhattacharya (ratnajit@iitg.ernet.in)
6	Queuing Systems	Electronics & Communication	Web	Prof. Sanjay Kumar Bose (skbose@iitg.ernet.in)
7	Statistical Signal Processing	Electronics & Communication	Video	Prof. P. K. Bora prabin@iitg.ernet.in
8	Signal Detection and Estimation Theory	Electronics & Communication	Web	Dr Rohit Sinha (rsinha@iitg.ernet.in)
9	Probability Methods in Civil Engineering	Civil Engineering	Web	Dr. C. Mallikarjuna (c.mallikarjuna@iitg.ernet.in)
10	Advanced Structural Design	Civil Engineering	Web	Dr. Kaustubh Dasgupta (kd@iitg.ernet.in)
11	Advanced Geotechnical Engineering	Civil Engineering	Web	Dr. Ajanta Sachan (ajantas@iitg.ernet.in)
12	Ground Water Hydrology	Civil Engineering	Web	Dr Rajib Kumar Bhattacharya (rkbc@iitg.ernet.in)
13	Transportation Economics	Civil Engineering	Web	Dr. A. Maurya (maurya@iitg.ernet.in)
14	Environmental Management & Impact Assessment	Civil Engineering	Video	Prof. C. Mahanta (chandan@iitg.ernet.in)
15	Geo-environmental Engineering	Civil Engineering	Web	Dr. S. Sreedeeep (srees@iitg.ernet.in)
16	Construction Economics & Finance	Civil Engineering	Web	Dr Bulu Pradhan (bulu@iitg.ernet.in)
17	Advanced Hydraulics	Civil Engineering	Video	Dr. S.A. Kartha (kartha@iitg.ernet.in)
18	Advanced Fluid Mechanics	Mechanical	Web	Dr. Niranjana Shahoo (shock@iitg.ernet.in) Dr. K. Arul Prakash (IITM)
19	Advanced Fluid Mechanics	Mechanical	Video	Dr. Niranjana Shahoo (shock@iitg.ernet.in) Dr. K. Arul Prakash (IITM)

20	Engineering Drawing	Mechanical	Web	Prof. P.S. Robi (psr@iitg.ernet.in)
21	Engineering Drawing	Mechanical	Video	Prof. P.S. Robi (psr@iitg.ernet.in)
22	Theory & Practice of Rotor Dynamics	Mechanical	Web	Prof. Rajiv Tiwari (rtiwari@iitg.ernet.in)
23	Theory & Practice of Rotor Dynamics	Mechanical	Video	Prof. Rajiv Tiwari (rtiwari@iitg.ernet.in)
24	Advanced Engineering Thermodynamics	Mechanical	Web	Prof. P. Mahanta (pinak@iitg.ernet.in)
25	Gas Dynamics	Mechanical	Web	Dr. Vinayak N Kulkarni (vinayak@iitg.ernet.in)
26	Nonlinear Vibration	Mechanical	Web	Prof. S.K. Dwivedy (dwivedy@iitg.ernet.in)
27	Nonlinear Vibration	Mechanical	Video	Prof. S.K. Dwivedy (dwivedy@iitg.ernet.in)
28	Heat Transfer	Chemical	Video	Prof. AK Ghoshal (aloke@iitg.ernet.in)
29	Heat Transfer	Chemical	Web	Dr. Anil Verma (anil.verma@iitg.ernet.in)
30	Fuel Cell Technology	Chemical	Web	Anil Verma (anil.verma@iitg.ernet.in)
31	Mass Transfer –I	Chemical	Web	Dr. SK Majumder (skmaju@iitg.ernet.in) & Dr. Chandan Das (cdas@iitg.ac.in)
32	Mass Transfer –I	Chemical	Video	Dr. B Mandal (bpmandal@iitg.ac.in)
33	Interfacial Engineering	Chemical	Web	Dr. Pallab Ghosh (pallabg@iitg.ernet.in)
34	Catalyst Science and Technology	Chemical	Web	Dr. M. De (mahuya@iitg.ernet.in)
35	Chemical Engg. Design-II	Chemical	Video	Dr. VV Goud (vvgoud@iitg.ernet.in)
36	Chemical Engg. Design-II	Chemical	Web	Dr. AK Goldar (animes@iitg.ac.in)
37	Chemical Technology –II	Chemical	Web	Dr. R.Uppaluri (ramgopalu@iitg.ernet.in)

38	Molecular simulations	Chemical	Web	Dr. A.K.D.Mahapatra (akdm@iitg.ac.in) & Dr. T.Banerjee (tamalb@iitg.ernet.in)
39	Process Control and Instrumentation	Chemical	Web	Dr. P.K. Saha (p.saha@iitg.ernet.in)
40	Process Design and Economics	Chemical	Video	Dr. V.S. Moholkar (vmoholkar@iitg.ernet.in)
41	Process Design and Economics	Chemical	Web	Dr. R.Uppaluri (ramgopalu@iitg.ernet.in)
42	Proteomics & Genomics	Biotechnology	Web	Dr. Vikash Kumar Dubey (vdubey@iitg.ernet.in)
43	Metabolic Engineering	Biotechnology	Web	Dr. Venkata Dasu Veeranki (veeranki@iitg.ernet.in)
44	Microbiology	Biotechnology	Web	Dr. Gurvinder Kaur Saini (gurvinder@iitg.ernet.in)
45	Plant Cell, Tissue and Organ Culture	Biotechnology	Web	Dr Rakhi Chaturvedi (rakhi_chaturvedi@iitg.ernet.in)
46	Genetic Engineering & Applications	Biotechnology	Web	Dr. Utpal Bora (ubora@iitg.ernet.in)
47	Cell biology	Biotechnology	Web	Dr. Sanjukta Patra (sanjukta@iitg.ernet.in)
48	Introductory Inorganic Chemistry	Chemistry	Web	Dr B. Mondal (biplab@iitg.ernet.in)
49	Reagents for Organic Reactions	Chemistry	Web	Prof. T.Punniyamurthy (tpunni@iitg.ernet.in)
50	Bio-organic Chemistry	Chemistry	Web	Dr S.S. Bag (ssbag75@iitg.ernet.in)
51	Environmental Chemistry	Chemistry	Web	Dr V. Sastri (sastricv@iitg.ernet.in) with Prof. T Pal, IITKGP
52	Chemistry of Materials	Chemistry	Web	Dr M. Quereshi (mq@iitg.ernet.in)
53	Experimental Physical Chemistry	Chemistry	Web	Dr G. Krishnamurthy (gkrishna@iitg.ernet.in)
54	Chemical Thermodynamics	Chemistry	Web	Dr G. Krishnamurthy (gkrishna@iitg.ernet.in) with Prof. B.L.Tembe, IITB.
55	Matrix Computations	Mathematics	Web	Prof. Rafikul Alam (rafik@iitg.ernet.in)
56	Partial Differential Equations	Mathematics	Web	Prof. Rajen Kumar Sinha (rajen@iitg.ernet.in)
57	Number Theory	Mathematics	Web	Dr.Anupam Saikia (a.saikia@iitg.ernet.in)
58	Mathematical Finance	Mathematics	Web	Dr.N.Selvaraju (n.selvaraju@iitg.ernet.in) & Dr.M.P.Rajan (rajanmp@iitg.ernet.in)

59	Stochastic Processes	Mathematics	Web	Dr.N.Selvaraju (nselvaraju@iitg.ernet.in)
60	Introduction to Number Theory and Cryptography	Mathematics	Video	Dr.Vinay V. Wagh (vinay.wagh@iitg.ernet.in)
61	Formal Languages & Automata Theory	Mathematics	Video	Dr.K.V.Krishna (Maths) (kvk@iitg.ernet.in) & Dr.D.Goswami(CSE) (dgoswami@iitg.ernet.in)
62	Complex Analysis	Mathematics	Video	Dr.M.Guru Prem Prasad (mgpp@iitg.ernet.in)
63	Cultural Studies	Humanities	Video	Dr Liza Das (liza@iitg.ernet.in)
64	Cultural Studies	Humanities	Web	Dr Liza Das (liza@iitg.ernet.in) and Dr Sukanya Sharma
65	English Language and Literature	Humanities	Web	Dr Liza Das (liza@iitg.ernet.in) and Dr Krishna Barua (krishna@iitg.ernet.in)
66	Science, Technology and Society	Humanities	Web	Dr Sambit Mallick (sambit@iitg.ernet.in) & Professor Archana Barua (archana@iitg.ernet.in)
67	Game Theory and Economics	Humanities	Video	Dr Debarshi Das (debarshidas@iitg.ernet.in)
68	Indian Society: Issues and Problems	Humanities	Web	Dr Sambit Mallick (sambit@iitg.ernet.in) and Dr Liza Das (liza@iitg.ernet.in)
69	Introduction to Sociology	Humanities	Web	Dr Sambit Mallick (sambit@iitg.ernet.in)
70	Electromagnetic Theory	Physics	Web	Dr C Kadolkar (charu@iitg.ernet.in)
71	Mathematical Physics – 1	Physics	Web	Dr Saurabh Basu (saurabh@iitg.ernet.in)
72	Condensed Matter Physics	Physics	Web	Dr S Ravi (sravi@iitg.ernet.in) & Dr S. B. Santra (santra@iitg.ernet.in)
73	Nuclear & Particle Physics	Physics	Video	Dr P. Poulouse (poulouse@iitg.ernet.in)
74	Applied Magnetism	Physics	Video	Dr S Ravi (sravi@iitg.ernet.in)

75	Advanced Statistical Physics	Physics	Web	Dr S. B. Santra (santra@iitg.ernet.in)
76	Fiber Optics	Physics	Video	Dr Sunil Khijwania (skhijwania@iitg.ernet.in)
77	Characterization of Materials	Physics	Video	Dr P. K. Giri (giri@iitg.ernet.in)
78	Electronic Properties of Solids	Physics	Web	Dr Subhradip Ghosh (subhra@iitg.ernet.in)
79	Physics of Magnetic Recording and Recording Media	Physics	Web	Dr. A. Perumal (perumal@iitg.ernet.in) & Prof A. Srinivasan (asrini @ iitg.ernet.in)
80	Spintronics: Materials and Technology	Physics	Web	Dr. A. Perumal (perumal@iitg.ernet.in)
81	Laser Spectroscopy	Physics	Web	Prof A Khare (alika@iitg.ernet.in)
82	Material processes for Industrial Designers	Design	Video	Prof. A.K Das (dasak@iitg.ernet.in)
83	Product Design – modeling and simulation	Design	Video	Prof. A.K Das (dasak@iitg.ernet.in)
84	That's Design- workshop oriented	Design	Video	Prof. Avinash Shinde (savinash@iitg.ernet.in)
85	New media studies	Design	Video	Prof. Mriganka Madhukaillya (mriganka@iitg.ernet.in)
86	Ergonomics for beginners Industrial design perspective-	Design	Video	Prof. Debkumar Chakraborty (dc@iitg.ernet.in)
87	Design fundamentals	Design	Video	Prof. Utpal Barua (utpalb@iitg.ernet.in)
88	Designing Film	Design	Video	Prof. Mriganka Madhukaillya (mriganka@iitg.ernet.in)
89	VLSI Design Verification and Test	Computer Science & Engg.	Web	Dr. Jatindra Kr. Deka (jatin@iitg.ernet.in) & Dr. Santosh Biswas (santosh_biswas@iitg.ernet.in)
90	Computational Number Theory & Cryptography	Computer Science	Web	Dr Pinaki Mitra (pinaki@iitg.ernet.in)