

Online Courses on SWAYAM listed to be launched w.e.f June 2017
(www.swayam.ac.in)

A. List of courses in Engineering

S. No.	Discipline	Course Name	Instructor	Institute	Next Run Rate
1	Aerospace engineering	Gas dynamics	Prof. Sameen. A	IITM	JULY-OCT 2017
2	Aerospace engineering	Engineering Thermodynamics	Prof. D. P. Mishra	IITK	JULY-OCT 2017
3	Aerospace engineering	Combustion in air breathing aero engines	Prof. Swetaprovo Chaudhuri	IISc	JULY-OCT 2017
4	Aerospace engineering	Aircraft Design	Prof. A.K.Ghosh	IITK	JULY-OCT 2017
5	Aerospace engineering	Aircraft Stability and Control	Prof. A.K.Ghosh	IITK	JULY-OCT 2017
6	Agriculture & Food Engineering	Momentum transfer in process engineering	Prof. Tridib Kumar Goswami	IITKGP	JULY-OCT 2017
7	Biological sciences & Biotechnology	Biostatistics and design of experiments	Prof. Mukesh Doble	IITM	JULY-SEP 2017
8	Biological sciences & Biotechnology	Biomedical nanotechnology	Prof. P.Gopinath	IITR	JULY-AUG 2017
9	Biological sciences & Biotechnology	Introduction to mechanobiology	Prof. Shamik Sen	IITB	AUG-OCT 2017
10	Biological sciences & Biotechnology	Animal Physiology	Prof. Mainak Das	IITK	JULY-OCT 2017
11	Biological sciences & Biotechnology	Cell Culture Technologies	Prof. Mainak Das	IITK	AUG-OCT 2017
12	Biological sciences & Biotechnology	Forest Biometry	Dr. Ankur Awadhiya & Prof. Mainak Das	IITK	AUG-OCT 2017
13	Biological sciences & Biotechnology	Industrial Biotechnology	Prof. Debabrata Das	IITKGP	JULY-OCT 2017
14	Chemical engineering	Trace and ultra-trace analysis of metals using atomic absorption spectrometry	Prof. J. R. Mudakavi	IISc	JULY-SEP 2017
15	Chemical engineering	Introduction to evolutionary dynamics	Prof. Supreet Saini	IITB	JULY-SEP 2017
16	Chemical engineering	Phase equilibrium thermodynamics	Prof. Gargi Das	IITKGP	JULY-SEP 2017
17	Chemical engineering	Transport phenomena	Prof. Sunando Dasgupta	IITKGP	JULY-OCT 2017

18	Chemical engineering	Unit operations of particulate matter	Prof. Shabina Khanam	IITR	JULY-AUG 2017
19	Chemistry and biochemistry	Basics of Fluorescence Spectroscopy	Prof. Pratik Sen	IITK	JULY-SEP 2017
20	Chemistry and biochemistry	Laser: Fundamentals and Applications	Prof. Manabendra Chandra	IITK	AUG-OCT 2017
21	Chemistry and biochemistry	Chemical and biological thermodynamics: principles to applications	Prof. Nand Kishore	IITB	JULY-OCT 2017
22	Chemistry and biochemistry	Analytical chemistry	Prof. Debashis Ray	IITKGP	JULY-OCT 2017
23	Chemistry and biochemistry	Co-ordination chemistry (chemistry of transition elements)	Prof. Debashis Ray	IITKGP	JULY-OCT 2017
24	Chemistry and biochemistry	Stereochemistry	Prof. Amit Basak	IITKGP	JULY-SEP 2017
25	Chemistry	Advanced Mathematical Methods for Chemistry	Prof. Madhav Ranganathan	IITK	JULY-OCT 2017
26	Civil engineering	Project planning and control	Prof. Koshy Varghese	IITM	JULY-SEP 2017
27	Civil engineering	Geotechnical engineering laboratory	Prof. J. N. Mandal	IITB	JULY-AUG 2017
28	Civil engineering	Mechanics of Solids	Prof. Priyanka Ghosh	IITK	JULY-OCT 2017
29	Civil engineering	Principles of Construction Management	Prof. Sudhir Misra	IITK	AUG-OCT 2017
30	Civil engineering	Foundation Design	Prof. N.R. Patra	IITK	JULY-OCT 2017
31	Civil engineering	Integrated Waste Management for a Smart City	Prof. Brajesh Kumar Dubey	IITKGP	JULY-OCT 2017
32	Civil engineering	Computational hydraulics	Prof. Anirban Dhar	IITKGP	JULY-OCT 2017
33	Civil engineering	Design of steel structures	Prof. Damodar Maiti	IITKGP	JULY-OCT 2017
34	Civil engineering	Strength of materials	Prof. Sriman Kumar Bhattacharya	IITKGP	JULY-OCT 2017
35	Civil engineering	Design of reinforced concrete structures	Prof. Nirjhar Dhang	IITKGP	JULY-OCT 2017
36	Civil engineering	Reinforced Concrete Road Bridges	Prof. Nirjhar Dhang	IITKGP	JULY-AUG 2017
37	Civil engineering	Structural analysis i	Prof. Amit Shaw	IITKGP	JULY-OCT 2017
38	Earth science	Digital Image Processing of Remote Sensing Data	Prof. Arun K. Saraf	IITR	JULY-AUG 2017

39	Civil engineering	Geoenvironmental Engineering (Environmental Geotechnology): Landfills, Slurry Ponds & Contaminated Sites	Prof. Manoj Datta	IITD	JULY-OCT 2017
40	Computer science and engineering	Computer architecture and organization	Prof.Indranil Sengupta & Prof. Kamalika Datta	IITKGP	JULY-OCT 2017
41	Computer science and engineering	An introduction to algorithm and analysis	Prof. Sourav Mukhopadhyay	IITKGP	JULY-OCT 2017
42	Computer science and engineering	Hardware modeling using verilog	Prof. Indranil Sengupta	IITKGP	AUG-OCT 2017
43	Computer science and engineering	Introduction to internet of things	Prof. Sudip Misra	IITKGP	JULY-OCT 2017
44	Computer science and engineering	Cloud computing	Prof. Soumya Kanti Ghosh	IITKGP	AUG-OCT 2017
45	Computer science and engineering	Programming in C++	Prof. Partha Pratim Das	IITKGP	JULY-SEP 2017
46	Computer science and engineering	Object oriented analysis and design	Prof. Partha Pratim Das	IITKGP	JULY-SEP 2017
47	Computer science and engineering	Introduction to Machine Learning	Prof. Sudeshna Sarkar	IITKGP	JULY-SEP 2017
48	Computer science and engineering	Design and analysis of algorithms	Prof. Madhavan Mukund	CMI	JULY-SEP 2017
49	Computer science and engineering	Programming, data structures and algorithms using python	Prof. Madhavan Mukund	CMI	JULY-SEP 2017
50	Computer science and engineering	Introduction to operating systems	Prof. Chester Robeiro	IITM	JULY-SEP 2017
51	Computer science and engineering	Ai: search methods for problem solving	Prof. Deepak Khemani	IITM	JULY-OCT 2017
52	Computer science and engineering	Privacy and Security in Online Social Media	Prof. Ponnurangam.K	IITD	JULY-OCT 2017
53	Computer science and engineering	Software testing	Prof. Meenakshi D'souza	IITB	JULY-OCT 2017
54	Computer science and engineering	Fundamentals of Database Systems	Prof. Arnab Bhattacharya	IITK	JULY -SEP 2017
55	Computer science and engineering	Modern Compilers - Theory and Practice	Prof. V. Krishna Nandivada	IITM	JULY-OCT 2017

56	Computer science and engineering	Theory of Computation	Prof. Raghunath Tewari	IITK	JULY -SEP 2017
57	Computer science and engineering	Computer Organization	Prof. Kamakoti	IITM	JULY-OCT 2017
58	Computer science and engineering	Introduction To Cryptology	Prof. S. Gangopadhay	IITR	JULY-AUG 2017
59	Electrical /Electronics/Communications Engg	Introduction to Wireless and Cellular Communications	Prof. David Kovil Pillai	IITM	JULY-OCT 2017
60	Computer science and engineering	Model Checking	Prof. B.Srivathsan	CMI	JULY-OCT 2017
61	Computer science and engineering	Introduction to Parallel Programming in OpenMP	Prof. Yogish Sabharwal	IITD	AUG-SEP 2017
62	Electrical / Electronics/ Communications Engg.	Optimal control	Prof. Barjeev Tyagi	IITR	JULY-SEP 2017
63	Electrical / Electronics/ Communications Engg.	Controls engineering	Prof. Ramkrishna.P	IITM	JULY-OCT 2017
64	Electrical / Electronics/ Communications Engg.	Basic electrical circuits	Prof. Nagendra Krishnapura	IITM	JULY-OCT 2017
65	Electrical / Electronics/ Communications Engg.	Analog circuits	Prof. Nagendra Krishnapura	IITM	JULY-OCT 2017
66	Electrical / Electronics/ Communications Engg.	Networks and systems	Prof. Andrew Thangaraj and Prof.C.S.Ramalingam	IITM	JULY-OCT 2017
67	Electrical / Electronics/ Communications Engg.	Microwave integrated circuits	Prof. Jayanta Mukherjee	IITB	JULY-SEP 2017
68	Electrical / Electronics/ Communications Engg.	Principles of Communication Systems: Part - II	Prof. Aditya K. Jagannatham	IITK	JULY-SEP 2017
69	Electrical / Electronics/ Communications Engg.	Applied Electromagnetics for Engineers	Prof. Pradeep Kumar	IITK	JULY-OCT 2017
70	Electrical / Electronics/ Communications Engg.	Estimation for Wireless Communications – MIMO/OFDM Cellular and Sensor Networks	Prof. Aditya K. Jagannatham	IITK	JULY -SEP 2017
71	Electrical / Electronics/ Communications Engg.	Design for internet of things	Prof. T V Prabhakar	IISc	JULY-SEP 2017

72	High Voltage Engg.(Electrical Engg.)	Advances in UHV Transmission and Distribution	Prof Subba Reddy B	IISc	JULY-SEP 2017
73	Electrical / Electronics/ Communications Engg.	Computational Electromagnetics & Applications	Prof. Dr. Krish Sankaran	IITM	JULY-OCT 2017
74	Electrical /Electronics/Communications Engg.	Enclosure design of electronics equipment	Prof. N. V Chalapathi Rao	IISc	JULY-OCT 2017
75	Electrical /Electronics/Communications Engg.	Design of photovoltaic systems	Prof. L Umanand	IISc	JULY-OCT 2017
76	Electrical /Electronics/Communications Engg.	Photonic integrated circuits	Prof. T. Srinivas	IISc	JULY-AUG 2017
77	Electrical /Electronics/Communications Engg.	Power system analysis	Prof. Debapriya Das	IITKGP	JULY-OCT 2017
78	Electrical /Electronics/Communications Engg.	Industrial instrumentation	Prof. Alok Barua	IITKGP	JULY-OCT 2017
79	Electrical /Electronics/Communications Engg.	Electrical machines - i	Prof. D Kastha/Prof. Suman Maiti	IITKGP	JULY-OCT 2017
80	Electrical /Electronics/Communications Engg.	Analog communication	Prof. Goutam Das	IITKGP	JULY-OCT 2017
81	Electrical /Electronics/Communications Engg.	Modern digital communication techniques	Prof. Suvra Sekhar Das	IITKGP	JULY-OCT 2017
82	Electrical /Electronics/Communications Engg	Digital speech processing	Prof. Shyamal Kumar Das Mandal	IITKGP	AUG-OCT 2017
83	Electrical /Electronics/Communications Engg	Satellite communication	Prof. Kalyan Kumar Bandyopadhyay	IITKGP	JULY-SEP 2017
84	Electrical /Electronics/Communications Engg	Analog Circuits and Systems through SPICE Simulation	Prof. Mrigank Sharad	IITKGP	JULY-SEP 2017
85	Electrical /Electronics/Communications Engg	An Introduction to Information Theory	Prof. Adrish Banerjee	IITK	JULY-SEP 2017
86	Humanities and Social Sciences	Soft skills	Prof. Binod Mishra	IITR	JULY-OCT 2017
87	Humanities and Social Sciences	Technical English for engineers	Prof. Aysha Iqbal	IITM	JULY-SEP 2017
88	Humanities and Social Sciences	Literature for competitive exams	Prof. Aysha Iqbal	IITM	JULY-SEP 2017
89	Humanities and Social Sciences	Applied linguistics	Prof. Rajesh Kumar	IITM	JULY-OCT 2017

90	Humanities and Social Sciences	Cognition, Transformation and Lives	Dr. Alok Bajpai	IITK	JULY-AUG 2017
91	Humanities and Social Sciences	Visual Perception and Art: A Survey Across the Cultures	Prof. Soumik Nandy Majumdar	IITK	JULY-AUG 2017
92	Humanities and Social Sciences	Introduction to Basic Cognitive Processes	Prof. ARK Verma	IITK	JULY-SEP 2017
93	Humanities and Social Sciences	Calculus of One Real Variable	Prof. Joydeep Dutta	IITK	AUG-OCT 2017
94	Humanities and Social Sciences	Science, Technology and Society	Prof. Sambit Mallick	IITG	JULY-OCT 2017
95	Humanities and Social Sciences	Gender and Literature	Prof. Avishek Parui	IITG	JULY-SEP 2017
96	Humanities and Social Sciences	Ecology and Society	Prof. Ngamjahao Kipgen	IITG	JULY-OCT 2017
97	Humanities and Social Sciences	History of English Language and Literature	Prof. Merin Simi Raj	IITM	JULY-OCT 2017
98	Humanities and Social Sciences	Introduction to Psychology	Prof. Braj Bhushan	IITK	JULY -SEP 2017
99	Humanities and Social Sciences	Developing Soft Skills and Personality	Prof. T. Ravichandran	IITK	JULY-SEP 2017
100	Humanities and Social Sciences	Human resource development	Prof. KBL Srivastava	IITKGP	JULY-OCT 2017
101	Humanities and Social Sciences	Educational leadership	Prof. Atasi Mohanty	IITKGP	JULY-SEP 2017
102	Management	Operations and supply chain management	Prof. G.srinivasan	IITM	JULY-OCT 2017
103	Management	Patent Law for Engineers and Scientists	Prof. Feroze Ali	IITM	JULY-OCT 2017
104	Management	Marketing research and analysis	Prof. J.K.Nayak	IITR	JULY-SEP 2017
105	Management	Project management for managers	Prof. Mukesh Kumar Barua	IITR	JULY-OCT 2017
106	Management	Total Quality Management - I	Prof. Raghu Nandan Sengupta	IITK	AUG-OCT 2017
107	Management	Gender justice and workplace security	Prof. Dipa Dube	IITKGP	JULY-AUG 2017
108	Management	Corporate social responsibility	Prof. Aradhna Malik	IITKGP	JULY-SEP 2017
109	Management	Decision modeling	Prof. Biswajit Mohanty	IITKGP	JULY-SEP 2017

110	Management	E-business	Prof. Mamata Jenamani	IITKGP	JULY-OCT 2017
111	Management	Six sigma	Prof. Jitesh J Thakkar	IITKGP	JULY-OCT 2017
112	Management	Introduction to Data Analytics	Prof. Nandan Sudarsanam Prof. Balaraman Ravindran	IITM	JULY-SEP 2017
113	Mathematics	Differential equations	Prof. Srinivasa Manam	IITM	JULY-OCT 2017
114	Mathematics	Integral equations, calculus of variations and its applications	Prof. P. N Agarwal Prof.D. N Pandey	IITR	JULY-OCT 2017
115	Mathematics	Nonlinear programming	Prof. S. K Gupta	IITR	JULY-AUG 2017
116	Mathematics	Numerical methods	Prof. Ameeya Kumar Nayak,Prof. Sanjeev Kumar	IITR	JULY-SEP 2017
117	Mathematics	Measure theory	Prof. Inder Kumar Rana	IITB	JULY-OCT 2017
118	Mathematics	Numerical Analysis	Prof. R. Usha	IITM	JULY-OCT 2017
119	Mathematics	Introduction to R Software	Prof. Shalabh	IITK	JULY-SEP 2017
120	Mathematics	Constrained and unconstrained optimization	Prof. A Goswami & Prof.Debjani Chakraborty	IITKGP	JULY-OCT 2017
121	Mathematics	Graph Theory	Prof. Soumen Maity	IISER PUNE	AUG-OCT 2017
122	Mathematics	Regression analysis	Prof. Soumen Maity	IISER PUNE	JULY-OCT 2017
123	Mechanical / Industrial/ Materials science and engineering	Iron making	Prof. Govind S. Gupta	IISc	JULY-SEP 2017
124	Mechanical / Industrial/ Materials science and engineering	Heat Treatment and Surface Hardening - II	Prof. Kallol Mondal & Sandeep Sangal	IITK	AUG-OCT 2017
125	Mechanical / Industrial/ Materials science and engineering	Phase Transformation in Materials	Prof. Krishanu Biswas	IITK	JULY-OCT 2017
126	Mechanical / Industrial/ Materials science and engineering	Fundamentals of manufacturing processes	Prof. D K Dwivedi	IITR	JULY-OCT 2017
127	Mechanical / Industrial/ Materials science and engineering	Fluid dynamics and turbomachines	Prof. Dhiman Chatterjee and Prof.Shamit Bakshi	IITM	JULY-SEP 2017

128	Mechanical / Industrial/ Materials science and engineering	Engineering fracture mechanics	Prof. K.Ramesh	IITM	JULY-OCT 2017
129	Mechanical / Industrial/ Materials science and engineering	Foundation of computational fluid dynamics	Prof. S. Vengadesan	IITM	JULY-SEP 2017
130	Mechanical / Industrial/ Materials science and engineering	Micro and nano scale energy transport	Prof. Arvind Pattamatta	IITM	JULY-OCT 2017
131	Mechanical / Industrial/ Materials science and engineering	Manufacturing of Composites	Prof. J. Ramkumar	IITK	JULY-SEP 2017
132	Mechanical / Industrial/ Materials science and engineering	Applied Ergonomics	Prof. Shantanu Bhattacharya & A. Gupta	IITK	JULY-SEP 2017
133	Mechanical / Industrial/ Materials science and engineering	Nature and Properties of Materials	Prof. Bishakh Bhattacharya	IITK	JULY -SEP 2017
134	Mechanical / Industrial/ Materials science and engineering	Mathematical Methods in Engineering and Science	Prof. Bhaskar Dasgupta	IITK	JULY-OCT 2017
135	Mechanical / Industrial/ Materials science and engineering	Electron diffraction and imaging	Prof. Sundararaman M	IITM	JULY-OCT 2017
136	Mechanical / Industrial/ Materials science and engineering	Mechatronics systems	Prof. Manivannan.P.V	IITM	JULY-SEP 2017
137	Mechanical / Industrial/ Materials science and engineering	Acoustic and Noise Control	Prof. Abijith Sarkar	IITM	JULY-OCT 2017
138	Mechanical / Industrial/ Materials science and engineering	Manufacturing Systems and Sustainability: An Applied Approach	Prof. Deepu Philip	IITK	AUG-OCT 2017
139	Mechanical/ Chemical Engineering	Convective Heat Transfer	Prof. Saptarshi Basu	IISc	JULY-OCT 2017
140	Mechanical / Industrial/ Materials science and engineering	Modeling and simulation of discrete event system	Prof. P. Kumar Jha	IITR	JULY-SEP 2017
141	Mechanical / Industrial/ Materials science and engineering	Processing of Polymers and Polymer Composites	Prof. Inderdeep Singh	IITR	JULY-SEP 2017
142	Mechanical / Industrial/ Materials science and engineering	Fundamentals of Material Processing - I	Prof. Shashank Shekhar	IITK	JULY -SEP 2017
143	Mechanical / Industrial/ Materials science and engineering	Steel Quality : Role of Secondary Refining & Continuous Casting	Prof. Santanu Kr. Ray	IITM	AUG-OCT 2017
144	Mechanical / Industrial/ Materials science and engineering	X-ray Crystallography & Diffraction	Prof. Ranjit Kumar Ray	IEST Shibpur	JULY-OCT 2017
145	Mechanical / Industrial/ Materials science and engineering	Noise Management & Control	Prof. Nachiketa Tiwari	IITK	JULY-OCT 2017

146	Mechanical / Industrial/ Materials science and engineering	Manufacturing System Technology Part 1 & 2	Prof. Shantanu Bhattacharya	IITK	JULY-OCT 2017
147	Mechanical / Industrial/ Materials science and engineering	Refrigeration And Air-conditioner	Prof. Ravi Kumar	IITR	JULY-SEP 2017
148	Mechanical / Industrial/ Materials science and engineering	Spur and helical gear cutting	Prof. Asimava Roychoudhury	IITKGP	JULY-AUG 2017
149	Mechanical / Industrial/ Materials science and engineering	Laws of thermodynamics	Prof. S.K Som & Prof.Suman Chakraborty	IITKGP	JULY-AUG 2017
150	Mechanical / Industrial/ Materials science and engineering	Energy conservation and waste heat recovery	Prof. PK Das & Prof. A Bhattacharya	IITKGP	JULY-OCT 2017
151	Multidisciplinary	Biology for engineers and other non- biologists	Prof. G.K.Suraishkumar/ Prof.Madhulika Dixit	IITM	JULY-AUG 2017
152	Multidisciplinary	Introduction to research	Prof. Prathap Haridoss	IITM	JULY-SEP 2017
153	Multidisciplinary	Health research fundamentals	Multi Faculty	NIE	JULY-SEP 2017
154	Multidisciplinary	Outcome based pedagogic principles for effective teaching	Prof. Shyamal Kumar Das Mandal	IITKGP	JULY-AUG 2017
155	Physics	Quantum Information and Computing	Prof. Dipan Ghosh	IITB	JULY-SEP 2017
156	Physics	Mathematics methods in Physics-I	Prof. Samudra Roy	IITKGP	JULY-OCT 2017
157	Physics	Classical mechanics: from newtonian to lagrangian formulation	Prof. Debamalya Banerjee	IITKGP	JULY-OCT 2017
158	Physics	Solid state physics	Prof. Amal Kumar Das	IITKGP	JULY-OCT 2017

B. List of Management Courses

S. No.	Course Name	PI Name	Institute Name	Next Run Date
1	Introduction to Investments	SG Badrinath	IIM Bangalore	5 th July 2017
2	Management Accounting for Decision-making	MS Narasimhan	IIM Bangalore	5 th August 2017
3	Introduction to Marketing Essentials	Ashis Mishra	IIM Bangalore	5 th September 2017
4	Customer Relationship Management	Shainesh	IIM Bangalore	5 th October 2017
5	Introduction to Corporate Finance	Ashok Thampy	IIM Bangalore	5 th November 2017
6	Predictive Analytics	Dinesh Kumar	IIM Bangalore	25 th November 2017
7	Introduction to Strategic Management	PD Jose	IIM Bangalore	5 th December 2017
8	Strategy and Sustainability	PD Jose	IIM Bangalore	5 th January 2018
9	Organization Design for Competitive Advantage	Sourav M	IIM Bangalore	5 th February 2018
10	Managerial Economics	Subhashish Gupta	IIM Bangalore	5 th March 2018