



**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, Belagavi**  
Proposed list of MOOCs (NPTEL Jan-April2022 Timeline) for B.E Degree Honours

**Electronics and Instrumentation Engineering (EI/BM/ML)**

**Table 1. List of certifiable courses approved for earning the extra credits under  
Name of the Board: Electronics and Instrumentation Engineering (EI/BM/ML)**

Sl. No.	Name of the Subject & Subject Matter Expert(SME)	Duration in Weeks	Start Date	End Date	Exam Dates	Enrolment End Date
1	Introduction to Experiments in Flight Prof. A.K.Ghosh	4 Weeks	February 21, 2022	March 18, 2022	April 23, 2022	February 21, 2022
2	Instrumentation and Process Control in Food Industry Prof. Ashis Kumar Datta	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
3	Experimental Stress Analysis Prof. K. Ramesh	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
4	Computational Systems Biology Prof. Karthik Raman	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
5	Bioengineering: An Interface with Biology and Medicine Prof. Sanjeeva Srivastava	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
6	Bioinformatics: Algorithms and Applications Prof. Michael Gromiha	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
7	Biostatistics and Design of experiments Prof. Mukesh Doble	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
8	Biointerface Engineering Prof. Lalit M. Pandey	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
9	Nanotechnology In Agriculture Prof. Mainak Das	8 Weeks	February 21, 2022	April 15, 2022	April 24, 2022	February 21, 2022
10	Process Control - Design, Analysis and Assessment Prof. Ragunathan Rengasamy	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
11	Process Equipment Design Prof. Shabina Khanam	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
12	Chemical Process Instrumentation Prof. Debasis Sarkar	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
13	Air pollution and Control Prof. Bhola Ram Gurjar	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
14	Remote Sensing: Principles and Applications Prof. Eswar Rajasekaran	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022



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15	Fundamental Algorithms: Design and Analysis Prof. Sourav Mukhopadhyay	4 Weeks	February 21, 2022	March 18, 2022	April 24, 2022	February 21, 2022
16	Artificial Intelligence: Knowledge Representation And Reasoning Prof. Deepak Khemani	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
17	Foundations of Cryptography Prof. Ashish Choudhury	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
18	Privacy and Security in Online Social Media Prof. Ponnurangam Kumaraguru	8 Weeks(in 12 Weeks Duration)	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
19	Data Analytics with Python Prof. A. Ramesh	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
20	Data Mining Prof. Pabitra Mitra	8 Weeks	February 21, 2022	April 15, 2022	April 23, 2022	February 21, 2022
21	Software Testing Prof. Rajib Mall	4 Weeks	January 24, 2022	February 18, 2022	March 27, 2022	January 31, 2022
22	Ethical Hacking Prof. Indranil Sengupta	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
23	Computer Architecture Prof. Smruti R.Sarangi	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
24	Cloud Computing and Distributed Systems Prof. Rajiv Misra	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
25	Computer Networks and Internet Protocol Prof. Soumya Kanti Ghosh Prof. Sandip Chakraborty	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
26	Cloud computing Prof. Soumya Kanti Ghosh	8 Weeks + 4 Weeks(N ew)	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
27	Deep Learning Prof. Prabir Kumar Biswas	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
28	Programming, Data Structures And Algorithms Using Python Prof. Madhavan Mukund	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
29	Design and analysis of algorithms Prof. Madhavan Mukund	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022



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30	Introduction to Machine Learning Prof. Balaraman Ravindran	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
31	Social Networks Prof. Sudarshan Iyengar	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
32	The Joy of Computing using Python Prof. Sudarshan Iyengar	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
33	Python for Data Science Prof. Ragunathan Rengasamy	4 Weeks	January 24, 2022	February 18, 2022	March 27, 2022	January 31, 2022
34	An Introduction to Programming Through C++ Prof. Abhiram Ranade	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
35	Blockchain and its Applications Prof. Sandip Chakraborty Prof. Shamik Sural	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
36	Data Base Management System Prof. Partha Pratim Das Prof. Samiran Chattopadhyay	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
37	Introduction To Internet Of Things Prof. Sudip Misra	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
38	Introduction To Soft Computing Prof. Debasis Samanta	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
39	An Introduction to Artificial Intelligence Prof. Mausam	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
40	Innovation by Design Prof. B. K. Chakravarthy	4 Weeks	February 21, 2022	March 18, 2022	April 24, 2022	February 21, 2022
41	Design, Technology and Innovation Prof. B. K. Chakravarthy	8 Weeks	February 21, 2022	April 15, 2022	April 23, 2022	February 21, 2022
42	CMOS Digital VLSI Design Prof. Sudeb Dasgupta	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
43	Electronics equipment integration and Prototype building Prof. N.V Chalapathi Rao	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
44	Discrete Time Signal Processing Prof. Mrityunjoy Chakraborty	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
45	Analog IC Design Prof. Aniruddhan.S	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022



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46	Digital IC Design Prof. Janakiraman	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
47	Digital System Design Prof. Neeraj Goel	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
48	Computer Vision and Image Processing – Fundamentals and Applications Prof. M. K. Bhuyan	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
49	Sensors and Actuators Prof. Hardik Jeetendra Pandya	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
50	Evolution Of Air Interface Towards 5G Prof. Suvra Sekhar Das	8 Weeks	February 21, 2022	April 15, 2022	April 23, 2022	February 21, 2022
51	VLSI Signal Processing Prof. Mrityunjoy Chakraborty	8 Weeks	February 21, 2022	April 15, 2022	April 24, 2022	February 21, 2022
52	Applied Linear Algebra Prof. Andrew Thangaraj	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
53	Health Research Fundamentals Multifaculty	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
54	Patent Drafting for Beginners Prof. Feroz Ali	4 Weeks	January 24, 2022	February 18, 2022	March 27, 2022	January 31, 2022
55	Effective Writing Prof. Binod Mishra	4 Weeks	January 24, 2022	February 18, 2022	March 27, 2022	January 31, 2022
56	Soft Skill Development Prof. Priyadarshi Patnaik Prof. V.N. Giri Prof. D. Suar	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
57	Enhancing Soft Skills and Personality Prof. T. Ravichandran	8 Weeks	February 21, 2022	April 15, 2022	April 24, 2022	February 21, 2022
58	Literature, Culture and Media Prof. Rashmi Gaur	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
59	Emotional Intelligence Prof. Rabindra Kumar Pradhan	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
60	Speaking Effectively Prof. Anjali Gera Roy	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
61	Patent Law for Engineers and Scientists Prof. Feroz Ali	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022



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62	Introduction On Intellectual Property To Engineers And Technologists Prof. Tapas Kumar Bandyopadhyay	8 Weeks	February 21, 2022	April 15, 2022	April 24, 2022	February 21, 2022
63	Intellectual Property Prof. Feroz Ali	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
64	Training and Development Prof. Susmita Mukhopadhyay Prof. Sangeeta Sahney Prof. S.Srinivasan	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
65	Financial Management For Managers Prof. Anil K. Sharma	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
66	Quality Design And Control Prof. Pradip Kumar Ray	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
67	Introduction to Operations Research Prof. G. Srinivasan	8 Weeks	February 21, 2022	April 15, 2022	April 24, 2022	February 21, 2022
68	Introduction to probability and Statistics Prof. G. Srinivasan	4 Weeks	January 24, 2022	February 18, 2022	March 27, 2022	January 31, 2022
69	Design Thinking - A Primer Prof. Ashwin Mahalingam Prof. Bala Ramadurai	4 Weeks	February 21, 2022	March 18, 2022	April 23, 2022	February 21, 2022
70	Ethics In Engineering Practice Prof. Susmita Mukhopadhyay	8 Weeks	February 21, 2022	April 15, 2022	April 23, 2022	February 21, 2022
71	Safety and Risk Analytics Prof. Jhareswar Maiti	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
72	Leadership Prof. Tuheena Mukherjee Prof. Kalyan Chakravarti	4 Weeks	January 24, 2022	February 18, 2022	March 27, 2022	January 31, 2022
73	Numerical Linear Algebra Prof. P. N. Agrawal Prof. D.N. Pandey	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
74	Ordinary and Partial Differential Equations and Applications Prof. P. N. Agrawal Prof. D.N. Pandey	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
75	Integral and Vector Calculus Prof. Hari Shankar Mahato	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
76	Basic Linear Algebra Prof. I. K. Rana	8 Weeks	February 21, 2022	April 15, 2022	April 24, 2022	February 21, 2022
77	Basic Real Analysis Prof. I. K. Rana	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022



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78	Introduction to Algebraic Geometry and Commutative Algebra Prof. Dilip P. Patil	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
79	Introduction to Queueing Theory Prof. N. Selvaraju	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
80	Mathematical Modelling: Analysis and Applications Prof. Aameya Kumar Nayak	4 Weeks	February 21, 2022	March 18, 2022	April 23, 2022	February 21, 2022
81	Scientific Computing using Matlab Prof. Mani Mehra Prof. Vivek Kumar Aggarwal	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
82	Essentials Of Data Science With R Software - 1: Probability And Statistical Inference Prof. Shalabh	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
83	Essentials Of Data Science With R Software - 2: Sampling Theory And Linear Regression Analysis Prof. Shalabh	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
84	Mechanical Measurement System Prof. Ravi Kumar	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
85	Fundamentals of Nuclear Power Generation Prof. Dipankar N.Basu	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
86	Finite Element Method Prof. Biswanath Banerjee Prof. Amit Shaw	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
87	Solar Photovoltaics: Principles, Technologies & Materials Prof. Ashish Garg	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
88	Fundamentals Of Electronic Materials And Devices Prof. Parasuraman Swaminathan	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
89	Fundamental of Fluid Mechanics for Chemical and Biomedical Engineers Prof. Raghvendra Gupta	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
90	Outcome Based Pedagogic Principles for Effective Teaching Prof. Shyamal Kumar Das Mandal	4 Weeks	February 21, 2022	March 18, 2022	April 24, 2022	February 21, 2022
91	Optical Sensors Prof. Sachin Kumar Srivastava	4 Weeks	January 24, 2022	February 18, 2022	March 27, 2022	January 31, 2022



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92	Physics of Biological Systems Prof. Mithun Mitra	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
93	Electronic Theory of Solids Prof. Arghya Taraphder	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022