Visvesvaraya Technological University
Belagavi-590 018, Karnataka

Board of Studies in Electronics and Instrumentation Engineering (EI/BM/ML)

List of MOOC Courses for the Award of B.E. (Honours)

Sl. No.	Title of MOOC Course	Course Area	Subject Matter Expert	Course Duration
	4 Week Courses (Assigned Credits – 1)			
1	Great Experiments in Psychology	Humanities and Social Sciences	Prof. Rajlakshmi Guha	4 Weeks
2	Water, Society and Sustainability	Humanities and Social Sciences	Prof. Jenia Mukherjee	4 Weeks
3	Managing Intellectual Property in Universities	Humanities and Social Sciences	Prof. Feroz Ali	4 Weeks
4	Patent Drafting for Beginners	Humanities and Social Sciences	Prof. Feroz Ali	4 Weeks
5	Body language: Key to Professional Success	Humanities and Social Sciences	Prof. Rashmi Gaur	4 Weeks
6	Design Thinking - A Primer	Management	Prof. Ashwin Mahalingam, Prof. Bala Ramadurai	4 Weeks
7	Leadership	Management	Prof. Kalyan Chakravarti, Prof. Tuheena Mukherjee	4 Weeks

8	Business Analytics & Data Mining Modeling Using R Part II	Management	Prof. Gaurav Dixit	4 Weeks
9	Cost Accounting	Management	Prof. Varadraj Bapat	4 Weeks
10	Decision-Making Under Uncertainty	Management	Prof. N. Gautam	4 Weeks
11	Product Design and Development	Mechanical Engineering	Prof. Inderdeep Singh	4 Weeks
12	Fundamentals of Electronic Device Fabrication	Metallurgical and Materials Engineering	Prof. Parasuraman Swaminathan	4 Weeks
13	Stress Management	Multidisciplinary	Prof. Rajlakshmi Guha	4 Weeks
14	Designing Learner-centric e-learning in STEM disciplines	Multidisciplinary	Prof. Sahana Murthy	4 Weeks
15	Teaching and Learning in General Programs: TALG	Multidisciplinary	Prof. N J Rao	4 Weeks
16	Python for Data Science	Computer Science and Engineering	Prof. Raghunathan Rengasamy	4 Weeks
17	Biomedical Nanotechnology	Biotechnology and Bioengineering	Prof. P. Gopinath	4 Weeks
18	Non-Parametric Statistical Inference	Mathematics	Prof.Niladri Chatterjee	4 Weeks
19	Global Navigation Satellite Systems and Applications	Earth Science	Prof. Arun K. Saraf	4 Weeks
	8 Week Courses (Assigned Credits – 2)			
20	Introduction to Smart Grid	Electrical and Electronics Engineering	Prof. N.P. Padhy, Prof. Premalata Jena	8 Weeks
21	Technologies for Clean and Renewable Energy Production	Chemical Engineering	Prof. P. Mondal	8 Weeks
22	Developing Soft Skills and Personality	Humanities and Social Sciences	Prof. T. Ravichandran	8 Weeks
23	Educational Leadership	Humanities and Social Sciences	Prof. Atasi Mohanty	8 Weeks

24	Health Research Fundamentals	Humanities and Social Sciences	Prof. P. Manickam	8 Weeks
25	Consumer Psychology	Humanities and Social Sciences	Prof. Naveen Kashyap	8 Weeks
26	Entrepreneurship and IP Strategy	Humanities and Social Sciences	Prof. Gouri Gargate	8 Weeks
27	Energy Economics and Policy	Humanities and Social Sciences	Prof. Shyamasree Dasgupta	8 Weeks
28	Managing Services	Management	Prof. Jayanta Chatterjee	8 Weeks
29	Knowledge Management	Management	Prof. KBL Srivastava	8 Weeks
30	Ethics in Engineering Practice	Management	Prof. Susmita Mukhopadhyay	8 Weeks
31	Innovation, Business Models and Entrepreneurship	Management	Prof. Rajat Agarwal, Prof. Vinay Sharma	8 Weeks
32	Marketing Research and Analysis	Management	Prof. J. K. Nayak	8 Weeks
33	Financial Accounting - IITB	Management	Prof. Varadraj Bapat	8 Weeks
34	Organization Development and Change in 21st Century	Management	Prof. Ashish Pandey	8 Weeks
35	Customer Relationship Management	Management	Prof. Swagato Chatterjee	8 Weeks
36	Introduction to Marketing Essentials	Management	Prof. Zillur Rahman	8 Weeks
37	Business Analytics & Text Mining Modeling Using Python	Management	Prof. Gaurav Dixit	8 Weeks
38	Marketing Management-I	Management	Prof. Jayanta Chatterjee, Prof. Shashi Shekhar Mishra	8 Weeks
39	Economics of Health and Health Care	Management	Prof. Angan Sengupta	8 Weeks
40	High Performance Computing for Scientists and Engineers	Mechanical Engineering	Prof. Somnath Roy	8 Weeks
41	Introduction to Research	Multidisciplinary	Prof. Prathap Haridoss	8 Weeks
42	Hardware Modeling using Verilog	Computer Science and Engineering	Prof. Indranil Sengupta	8 Weeks

43	Computer Graphics	Computer Science and Engineering	Prof. Samit Bhattacharya	8 Weeks
44	Google Cloud Computing Foundation Course	Computer Science and Engineering	Prof. Soumya Kanti Ghosh	8 Weeks
45	Data Base Management System	Computer Science and Engineering	Prof. Partha Pratim Das Prof. Samiran Chattopadhyay	8 Weeks
46	Cloud computing	Computer Science and Engineering	Prof. Soumya Kanti Ghosh	8 Weeks
47	Design, Technology and Innovation	Design Engineering	Prof. B.K. Chakravarthy	8 Weeks
48	Numerical methods	Mathematics	Prof. Ameeya Kumar Nayak, Prof. Sanjeev Kumar	8 Weeks
49	Essential Mathematics for Machine Learning	Mathematics	Prof. Sanjeev Kumar, Prof. S.K. Gupta	8 Weeks
50	Introduction to R Software	Mathematics	Prof. Shalabh	8 Weeks
51	Programming, Data Structures and Algorithms Using Python	Computer Science and Engineering	Prof. Madhavan Mukund	8 Weeks
52	Advanced Linear Continuous Control Systems: Applications with MATLAB Programming and Simulink	Electrical and Electronics Engineering	Prof. Yogesh Vijay Hote	8 Weeks
53	Operations Research	Mathematics	Prof.Kusum Deep	8 Weeks
54	Tissue Engineering	Biotechnology & Bioengineering	Prof. Vignesh Muthuvijayan	8 Weeks
55	Biomaterials for Bone Tissue Engineering Applications	Metallurgical and Materials Engineering	Prof. Bikramjit Basu	8 Weeks
56	Remote Sensing and GIS	Civil Engineering	Prof. Rishikesh Bharti	8 Weeks
	12 Week Courses (Assigned Credits – 3)			
57	Software Testing	Computer Science and Engineering	Prof. Meenakshi D'souza	12 Weeks

58	Applied Optimization for Wireless, Machine Learning, Big Data	Electrical and Electronics Engineering	Prof. Aditya K. Jagannatham	12 Weeks
59	Design of Photovoltaic Systems	Electrical and Electronics Engineering	Prof. UML Anand	12 Weeks
60	Fabrication Techniques For MEMS-Based Sensors : Clinical Perspective	Electrical and Electronics Engineering	Prof. Hardik Jeetendra Pandya	12 Weeks
61	Introductory Neuroscience & Neuro-Instrumentation	Electrical and Electronics Engineering	Prof. Mahesh Jayachandra	12 Weeks
62	Op-Amp Practical Applications: Design, Simulation and Implementation	Electrical and Electronics Engineering	Prof. Hardik Jeetendra Pandya	12 Weeks
63	Advanced Materials and Processes	Metallurgical and Materials Engineering	Prof. Jayanta Das	12 Weeks
64	X-Ray Crystallography and Diffraction	Metallurgical and Materials Engineering	Prof. Ranjit Kumar, Prof. S.Sankaran	12 Weeks
65	Chemical Process Safety	Chemical Engineering	Prof. Shishir Sinha	12 Weeks
66	Patent Law for Engineers and Scientists	Humanities and Social Sciences	Prof. Feroz Ali	12 Weeks
67	Soft Skills	Humanities and Social Sciences	Prof. Binod Mishra	12 Weeks
68	Science, Technology and Society	Humanities and Social Sciences	Prof. Sambit Mallick	12 Weeks
69	Human Resource Development	Management	Prof. KBL Srivastava	12 Weeks
70	Soft Skills for Business Negotiations and Marketing Strategies	Management	Prof. Uttam Kumar Banerjee	12 Weeks
71	Industrial Safety Engineering	Management	Prof. Jhareswar Maiti	12 Weeks
72	Working Capital Management	Management	Prof. Anil K. Sharma	12 Weeks
73	Project Management for Managers	Management	Prof. Mukesh Kumar Barua	12 Weeks
74	Organizational Behaviour	Management	Prof. M. P. Ganesh	12 Weeks
75	International Business	Management	Prof. J. K. Nayak	12 Weeks

76	Principles of Management	Management	Prof. Susmita Muhopadhyay, Prof. S. Srinivasan	12 Weeks
77	Decision Support System for Managers	Management	Prof. Kunal Kanti Ghosh, Prof. Anupam Ghosh, Prof Sujoy Bhattacharya	12 Weeks
78	Management Information System	Management	Prof. Kunal Kanti Ghosh, Prof. Saini Das, Prof. Surojit Mukherjee	12 Weeks
79	Management Accounting	Management	Prof. Anil K. Sharma	12 Weeks
80	Managerial Economics	Management	Prof. Trupti Mishra	12 Weeks
81	Financial Accounting – IIT Mandi	Management	Prof. Puran Singh	12 Weeks
82	Finite Element Method: Variational Methods to Computer Programming	Mechanical Engineering	Prof. Atanu Banerjee, Prof. Arup Nandy	12 Weeks
83	Neuroscience of Human Movements	Multidisciplinary	Prof. Varadhan	12 Weeks
84	Numerical Methods for Engineers	Multidisciplinary	Prof. Niket Kaisare	12 Weeks
85	Learning Analytics Tools	Multidisciplinary	Prof. Ramkumar Rajendran	12 Weeks
86	Fundamentals of Artificial Intelligence	Multidisciplinary	Prof. Shyamanta M. Hazarika	12 Weeks
87	Solar Energy Engineering and Technology	Physics	Prof. Pankaj Kalita	12 Weeks
88	Deep Learning	Computer Science and Engineering	Prof. Prabir Kumar Biswas	12 Weeks
89	Computer Architecture and Organization	Computer Science and Engineering	Prof. Indranil Sengupta, Prof. Kamalika Datta	12 Weeks
90	Introduction to Industry 4.0 and Industrial Internet of Things	Computer Science and Engineering	Prof. Sudip Misra	12 Weeks
91	Social Networks	Computer Science and Engineering	Prof. Sudarshan Iyengar	12 Weeks
92	Artificial Intelligence Search Methods for Problem Solving	Computer Science and Engineering	Prof. Deepak Khemani	12 Weeks

93	The Joy of Computing using Python	Computer Science and Engineering	Prof. Sudarshan Iyengar, Prof. Yayati Gupta	12 Weeks
94	Applied Natural Language Processing	Computer Science and Engineering	Prof. Ramaseshan R	12 Weeks
95	Introduction to Algorithms and Analysis	Computer Science and Engineering	Prof. Sourav Mukhopadhyay	12 Weeks
96	Bandit Algorithm (Online Machine Learning)	Computer Science and Engineering	Prof. Manjesh hanawal	12 Weeks
97	Deep Learning	Computer Science and Engineering	Prof. Prabir Kumar Biswas	12 Weeks
98	Introduction to Industry4.0 and Industrial Internet of Things	Computer Science and Engineering	Prof. Sudip Misra	12 Weeks
99	Introduction to Machine Learning	Computer Science and Engineering	Prof. BalaramanRavindran	12 Weeks
100	System Design for Sustainability	Design Engineering	Prof. Sharmistha Banerjee	12 Weeks
101	Functional and Conceptual Design	Design Engineering	Prof. Asokan T	12 Weeks
102	Regression Analysis	Mathematics	Prof. Soumen Maity	12 Weeks
103	Computational Commutative Algebra	Mathematics	Prof. Manoj Kummini	12 Weeks
104	Scientific Computing using Matlab	Mathematics	Prof. Mani Mehra, Prof. Vivek K. Aggarwal	12 Weeks
105	Linear Algebra	Mathematics	Prof. Arbind Kumar Lal	12 Weeks
106	Machine Learning for Engineering and Science Applications	Computer Science and Engineering	Prof. Balaji Srinivasan, Prof. Ganapthy Krishnamurthi	12 Weeks
107	Operating System Fundamentals	Computer Science and Engineering	Prof.Santanu Chattopadhyay	12 Weeks
108	Mapping Signal Processing Algorithms to DSP Architectures	Electrical and Electronics Engineering	Prof. Nitin Chandrachoodan	12 Weeks
109	Microelectronics: Devices to Circuits	Electrical and Electronics Engineering	Prof.Sudeb Dasgupta	12 Weeks

110	Op-Amp Practical Applications: Design, Simulation & Implementation	Electrical and Electronics Engineering	Prof. Hardik Jeetendra Pandya	12 Weeks
111	Sensors and Actuators	Electrical and Electronics Engineering	Prof Hardik J Pandya	12 Weeks
112	Pattern Recognition and Application	Electrical and Electronics Engineering	Prof. Prabir Kumar Biswas	12 Weeks
113	Introduction to Fuzzy Set Theory, Arithmetic and Logic	Mathematics	Prof. Niladri Chatterjee	12 Weeks
114	Spectroscopic Techniques for Pharmaceutical and Biopharmaceutical Industries	Chemistry	Prof. Shashank Deep	12 Weeks
115	Drug Delivery: Principles and Engineering	Biotechnology and Bioengineering	Prof. Rachit Agarwal	12 Weeks
116	Genetic Engineering: Theory and Application	Biotechnology and Bioengineering	Prof. Vishal Trivedi	12 Weeks
117	Fundamentals of Food Process Engineering	Biotechnology and Bioengineering	Prof. Jayeeta Mitra	12 Weeks