Bouquet of MOOCs Courses

Name of the Board: BoS in IP/IM/MA

SI No	Title of MOOC Course	Course Area	Subject Matter Expert	Course Duration
1	Plant Design and Economics	Chemical Engineering	Prof. Debasis Sarkar	12 Weeks
2	Technologies for Clean and Renewable Energy Production	Chemical Engineering	Prof. P. Mondal	8 Weeks
3	Chemical Process Safety	Chemical Engineering	Prof. Shishir Sinha	12 Weeks
4	Mechanical Operation	Chemical Engineering	Prof. Shabina Khanam	4 Weeks
5	Power Electronics	Electrical and Electronics Engineering	Prof. G.Bhuvaneshwari	12 weeks
6	Introduction to Embedded System Design	Electrical and Electronics Engineering	Prof. Dhananjay V. Gadre Prof. Badri N Subudhi	12 weeks
7	Developing Soft Skills and Personality	Humanities and Social Sciences	Prof. T. Ravichandran	8 Weeks
8	Great Experiments in Psychology	Humanities and Social Sciences	Prof. Rajlakshmi Guha	4 Weeks
9	Water, Society and Sustainability	Humanities and Social Sciences	Prof. Jenia Mukherjee	4 Weeks
10	Educational leadership	Humanities and Social Sciences	Prof. Atasi Mohanty	8 Weeks
11	Health Research Fundamentals	Humanities and Social Sciences	Prof. P. Manickam	8 Weeks
12	Managing Intellectual Property in	Humanities and Social	Prof. Feroz Ali	4 Weeks

	Universities	Sciences		
13	Patent Drafting for Beginners	Humanities and Social Sciences	Prof. Feroz Ali	4 Weeks
14	Patent Law for Engineers and Scientists	Humanities and Social Sciences	Prof. Feroz Ali	12 Weeks
15	Consumer Psychology	Humanities and Social Sciences	Prof. Naveen Kashyap	8 Weeks
16	Soft skills	Humanities and Social Sciences	Prof. Binod Mishra	12 Weeks
17	Introduction to Western Political Thought	Humanities and Social Sciences	Prof. Mithilesh Kumar Jha	12 Weeks
18	Entrepreneurship and IP strategy	Humanities and Social Sciences	Prof. GouriGargate	8 Weeks
19	Energy Economics And Policy	Humanities and Social Sciences	Prof. Shyamasree Dasgupta	8 Weeks
20	Body language: Key to professional Success	Humanities and Social Sciences	Prof. Rashmi Gaur	4 Weeks
21	Science, Technology and Society	Humanities and Social Sciences	Prof. Sambit Mallick	12 weeks
22	Sociological Perspectives on Modernity	Humanities and Social Sciences	Prof. Sambit Mallick	12 weeks
23	Right to Information and Good Governance	Law	Prof. Sairam Bhat	12 Weeks
24	Constitution of India and Environmental Governance: Administrative and Adjudicatory Process	Law	Prof. Sairam Bhat Prof. M. K. Ramesh	12 Weeks
25	Constitutional Studies	Law	Prof. Sudhir Krishnaswamy	12 Weeks
26	Human resource development	Management	Prof. KBL Srivastava	12 Weeks

27	Managing Services	Management	Prof. Jayanta Chatterjee	8 Weeks
28	Design Thinking - A Primer	Management	Prof. Ashwin Mahalingam Prof. BalaRamadurai	4 Weeks
29	Soft Skills For Business Negotiations And Marketing Strategies	Management	Prof. Uttam Kumar Banerjee	12 Weeks
30	Knowledge Management	Management	Prof. KBL Srivastava	8 Weeks
31	Leadership	Management	Prof. Kalyan Chakravarti Prof. Tuheena Mukherjee	4 Weeks
32	Gender justice and workplace security	Management	Prof. Dipa Dube	4 Weeks
33	Industrial Safety Engineering	Management	Prof. JhareswarMaiti	12 Weeks
34	Ethics in Engineering Practice	Management	Prof. Susmita Mukhopadhyay	8 Weeks
35	Working Capital Management	Management	Prof. Anil K. Sharma	12 Weeks
36	Innovation, Business Models and Entrepreneurship	Management	Prof. Rajat Agarwal Prof. Vinay Sharma	8 Weeks
37	Business Analytics & Data Mining Modeling Using R Part II	Management	Prof. Gaurav Dixit	4 Weeks
38	Project management for managers	Management	Prof. Mukesh Kumar Barua	12 Weeks
39	Marketing research and analysis	Management	Prof. J. K. Nayak	8 Weeks
40	Manufacturing Strategy	Management	Prof. Rajat Agarwal	8 Weeks
41	Organizational Behaviour	Management	Prof. M. P. Ganesh	12 Weeks
42	Financial Accounting - IITB	Management	Prof. Varadraj Bapat	8 Weeks
43	Cost Accounting	Management	Prof. Varadraj Bapat	4 Weeks
44	International Business	Management	Prof. J. K. Nayak	12 Weeks
45	Path Integral Methods in Physics & Finance	Management	Prof. J. P. Singh	12 Weeks
46	Organization Development and Change in 21st Century	Management	Prof. Ashish Pandey	8 Weeks

47	Customer Relationship Management	Management	Prof. Swagato Chatterjee	8 Weeks
48	Principles of Management	Management	Prof. SusmitaMuhopadhyay Prof. S. Srinivasan	12 Weeks
49	Decision Support System for Managers	Management	Prof. Kunal Kanti Ghosh Prof. Anupam Ghosh Prof Sujoy Bhattacharya	12 Weeks
50	Management Information System	Management	Prof. Kunal Kanti Ghosh Prof. Saini Das Prof. Surojit Mukherjee	12 Weeks
51	Introduction to Marketing Essentials	Management	Prof. Zillur Rahman	8 Weeks
52	Decision-Making Under Uncertainty	Management	Prof. N. Gautam	4 Weeks
53	Training of Trainers	Management	Prof. Santosh Rangnekar	12 Weeks
54	Management Accounting	Management	Prof. Anil K. Sharma	12 Weeks
55	Business Analytics & Text Mining Modeling Using Python	Management	Prof. Gaurav Dixit	8 Weeks
56	Managerial Economics	Management	Prof. Trupti Mishra	12 Weeks
57	Marketing Management-I	Management	Prof. Jayanta Chatterjee Prof. Shashi Shekhar Mishra	8 weeks
58	Economics of Health and Health Care	Management	Prof. Angan Sengupta	8 weeks
59	The Future of Manufacturing Business: Role of Additive Manufacturing	Management	Prof. R. K. Amit Prof. U. Chandrasekhar	8 Weeks
60	Financial accounting - IITMandi	Management	Prof. Puran Singh	12 Weeks
61	Manufacturing Systems Technology I & II	Mechanical Engineering	Prof. Shantanu Bhattacharya	12 Weeks
62	Rapid Manufacturing	Mechanical Engineering	Prof. J. Ramkumar Prof. Amandeep Singh	12 Weeks
63	Heat Exchangers: Fundamentals and Design Analysis	Mechanical Engineering	Prof. Prasanta Kumar Das Prof. Indranil Ghosh	12 Weeks

64	Mechanism And Robot Kinematics	Mechanical Engineering	Prof. Anirvan Dasgupta	8 Weeks
65	Advanced Fluid Mechanics	Mechanical Engineering	Prof. Suman Chakraborty	12 Weeks
66	Robotics	Mechanical Engineering	Prof. D. K. Pratihar	8 Weeks
67	Mechanical Measurement Systems	Mechanical Engineering	Prof. Ravi Kumar	8 Weeks
68	Automation in Manufacturing	Mechanical Engineering	Prof. Shrikrishna N. Joshi	12 Weeks
69	Finite Element Method: Variational Methods to Computer Programming	Mechanical Engineering	Prof. Atanu Banerjee Prof. Arup Nandy	12 Weeks
70	High Performance Computing for Scientists and Engineers	Mechanical Engineering	Prof. Somnath Roy	8 Weeks
71	Foundation of Computational Fluid Dynamics	Mechanical Engineering	Prof. Vengadesan	8 Weeks
72	Advances in welding and joining technologies	Mechanical Engineering	Prof. Swarup Bag	8 Weeks
73	Introduction to Mechanical Vibration	Mechanical Engineering	Prof. Anil Kumar	8 Weeks
74	Fundamentals of Surface Engineering: Mechanisms,Processes and Characterizations	Mechanical Engineering	Prof. D. K. Dwivedi	12 Weeks
75	Product Design and Development	Mechanical Engineering	Prof. Inderdeep Singh	4 Weeks
76	Work System Design	Mechanical Engineering	Prof. Inderdeep Singh	12 Weeks
77	Refrigeration and air-conditioning	Mechanical Engineering	Prof. Ravi Kumar	8 Weeks

		Mechanical		
78	Principles of Metal Forming Technology	Engineering	Prof. Pradeep Kumar Jha	8 Weeks
79	Theory of Production Processes	Mechanical Engineering	Prof. Pradeep Kumar Jha	12 Weeks
80	Computational Continuum Mechanics	Mechanical Engineering	Prof. Sachin Singh Gautam	12 Weeks
81	Fluid dynamics and turbomachines	Mechanical Engineering	Prof. Dhiman Chatterjee Prof. ShamitBakshi	8 Weeks
82	Advanced Machining Processes	Mechanical Engineering	Prof. Manas Das	8 Weeks
83	Principle of Hydraulic Machines and System Design	Mechanical Engineering	Prof. Pranab K. Mondal	8 Weeks
84	Basics of Materials Engineering	Mechanical Engineering	Prof. Ratna Kumar Annabattula	12 Weeks
85	Engineering drawing and computer graphics	Mechanical Engineering	Prof. Rajaram Lakkaraju	12 Weeks
86	Fundamentals of Convective Heat Transfer	Mechanical Engineering	Prof. AmareshDalal	12 Weeks
87	Computational Fluid Dynamics using Finite Volume Method	Mechanical Engineering	Prof. KameswararaoAnupindi	12 Weeks
88	Selection Of Nanomaterials For Energy Harvesting And Storage Application	Mechanical Engineering	Prof. Kaushik Pal	4 Weeks
89	Solid Mechanics	Mechanical Engineering	Prof. Ajeet Kumar	12 Weeks
90	Fundamentals of Conduction and Radiation	Mechanical Engineering	Prof. AmareshDalal Prof. Dipankar N. Basu	12 Weeks
91	Steam Power Engineering	Mechanical Engineering	Prof. Vinayak N. Kulkarni	8 Weeks
92	Dynamic Behaviour Of Materials	Mechanical	Prof. Prasenjit Khanikar	12 Weeks

		Engineering		
93	Aircraft Propulsion	Mechanical Engineering	Prof. Vinayak N. Kulkarni	12 weeks
94	Basics Of Finite Element Analysis-I	Mechanical Engineering	Prof. Nachiketa Tiwari	8 weeks
95	Foundations of Cognitive Robotics	Mechanical Engineering	Prof. Bishakh Bhattacharya	4 weeks
96	BioMEMS And Microfluidics	Mechanical Engineering	Prof. Shantanu Bhattacharya	8 weeks
97	Engineering Metrology	Mechanical Engineering	Prof. J. Ramkumar	12 weeks
98	Introduction to Composites	Mechanical Engineering	Prof. Nachiketa Tiwari	12 weeks
99	Elementary Stereology for Quantitative Metallography	Metallurgical and Materials Engineering	Prof. Sandeep Sangal Prof. Sankaran	4 Weeks
100	Welding of Advanced High Strength Steels for Automotive Applications	Metallurgical and Materials Engineering	Prof. Murugaiyan Amirthalingam	4 Weeks
101	Structural Analysis of Nanomaterials	Metallurgical and Materials Engineering	Prof. Kaushik Pal	4 Weeks
102	Advanced Materials and Processes	Metallurgical and Materials Engineering	Prof. Jayanta Das	12 Weeks
103	Energy conservation and waste heat recovery	Metallurgical and Materials Engineering	Prof. P. K. Das Prof. A Bhattacharya	12 Weeks
104	Powder Metallurgy	Metallurgical and Materials Engineering	Prof. Ranjit Bauri	12 Weeks
105	X-ray Crystallography & Diffraction	Metallurgical and Materials Engineering	Prof. Ranjit Kumar Ray Prof. S. Sankaran	12 Weeks
106	Ironmaking and Steelmaking	Metallurgical and Materials Engineering	Prof. Gour Gopal Roy	12 Weeks

107	Aqueous Corrosion and Its Control	Metallurgical and Materials Engineering	Prof. V. S. Raja	12 Weeks
108	Fundamentals of electronic device fabrication	Metallurgical and Materials Engineering	Prof. Parasuraman Swaminathan	4 Weeks
109	Thermo-Mechanical And Thermo-Chemical Processes	Metallurgical and Materials Engineering	Prof. Vivek Pancholi Prof. S. R. Meka	8 Weeks
110	Corrosion - Part II	Metallurgical and Materials Engineering	Prof. Kallol Mondal	8 weeks
111	Fundamentals Of Material Processing - I	Metallurgical and Materials Engineering	Prof. Shashank Shekhar	8 weeks
112	Introduction to Research	Multidisciplinary	Prof. PrathapHaridoss	8 weeks
113	Ecology and Environment	Multidisciplinary	Prof. Abhijit Deshpande Prof. R. Ravi Krishna	8 Weeks
114	Neuroscience of Human Movements	Multidisciplinary	Prof. Varadhan	12 weeks
115	Stress Management	Multidisciplinary	Prof. Rajlakshmi Guha	4 Weeks
116	Designing learner-centric e-learning in STEM disciplines	Multidisciplinary	Prof. Sahana Murthy	4 Weeks
117	Numerical Methods for Engineers	Multidisciplinary	Prof. NiketKaisare	12 Weeks
118	Teaching And Learning in General Programs: TALG	Multidisciplinary	Prof. N J Rao	4 Weeks
119	Learning Analytics Tools	Multidisciplinary	Prof. Ramkumar Rajendran	12 Weeks
120	Fundamentals Of Artificial Intelligence	Multidisciplinary	Prof. Shyamanta M. Hazarika	12 Weeks
121	Solar Energy Engineering and Technology	Physics	Prof. Pankaj Kalita	12 Weeks
122	Problem solving through Programming In C	Computer Science and Engineering	Prof. Anupam Basu	12 Weeks
123	Programming in Java	Computer Science and Engineering	Prof. DebasisSamanta	12 Weeks
124	Deep Learning	Computer Science and	Prof. Prabir Kumar Biswas	12 Weeks

		Engineering		
125	Hardware modeling using verilog	Computer Science and Engineering	Prof. Indranil Sengupta	8 Weeks
126	Computer architecture and organization	Computer Science and Engineering	Prof. Indranil Sengupta Prof. Kamalika Datta	12 Weeks
127	Switching Circuits and Logic Design	Computer Science and Engineering	Prof. Indranil Sengupta	12 Weeks
128	Introduction to Industry 4.0 and Industrial Internet of Things	Computer Science and Engineering	Prof. Sudip Misra	12 Weeks
129	Social Networks	Computer Science and Engineering	Prof. Sudarshan Iyengar	12 Weeks
130	Artificial Intelligence Search Methods For Problem Solving	Computer Science and Engineering	Prof. Deepak Khemani	12 Weeks
131	The Joy of Computing using Python	Computer Science and Engineering	Prof. Sudarshan Iyengar Prof. Yayati Gupta	12 Weeks
132	Object Oriented System Development using UML, Java and Patterns	Computer Science and Engineering	Prof. Rajib Mall	12 Weeks
133	Applied Natural Language Processing	Computer Science and Engineering	Prof. Ramaseshan R	12 Weeks
134	Computer Graphics	Computer Science and Engineering	Prof. Samit Bhattacharya	8 Weeks
135	Introduction to algorithms and analysis	Computer Science and Engineering	Prof. Sourav Mukhopadhyay	12 Weeks
136	Google Cloud Computing Foundation Course	Computer Science and Engineering	Prof. Soumya Kanti Ghosh	8 weeks
137	Bandit Algorithm (Online Machine Learning)	Computer Science and Engineering	Prof. Manjeshhanawal	12 Weeks
138	System design for sustainability	Design Engineering	Prof. Sharmistha Banerjee	12 Weeks

139	Functional and Conceptual Design	Design Engineering	Prof. Asokan T	12 Weeks
140	Design, Technology and Innovation	Design Engineering	Prof. B.K. Chakravarthy	8 Weeks
141	Understanding Ethnography	Design Engineering	Prof. Nina Sabnani	8 Weeks
142	Introduction to Abstract Group Theory	Mathematics	Prof. Krishna Hanumanthu	8 Weeks
143	Regression Analysis	Mathematics	Prof. SoumenMaity	12 Weeks
144	Introduction to Abstract and Linear Algebra	Mathematics	Prof. Sourav Mukhopadhyay	8 Weeks
145	Numerical methods	Mathematics	Prof. Ameeya Kumar Nayak Prof. Sanjeev Kumar	8 Weeks
146	Essential Mathematics for Machine Learning	Mathematics	Prof. Sanjeev Kumar Prof. S.K. Gupta	8 Weeks
147	Engineering Mathematics - I	Mathematics	Prof. Jitendra Kumar	12 Weeks
148	Computational Commutative Algebra	Mathematics	Prof. Manoj Kummini	12 Weeks
149	Scientific Computing using Matlab	Mathematics	Prof. Mani Mehra Prof. Vivek K. Aggarwal	12 Weeks
150	Measure Theory	Mathematics	Prof. Indrava Roy	12 Weeks
151	Dynamical System and Control	Mathematics	Prof. N. Sukavanam Prof. D. N. Pandey	12 Weeks
152	Introduction to Fuzzy Set Theory, Arithmetic and Logic	Mathematics	Prof. Niladri Chatterjee	12 Weeks
153	Introduction to Methods of Applied Mathematics	Mathematics	Prof. Mani Mehra Prof. Vivek aggarwal	12 Weeks
154	Introduction to R Software	Mathematics	Prof. Shalabh	8 weeks
155	Linear Algebra	Mathematics	Prof. Arbind Kumar Lal	12 Weeks