

Format for submission of Bouquet of MOOCs Courses

Table 1. List of certifiable courses approved for earning the extra credits under type Electronics and Instrumentation Engineering (EI/BM/ML) Board courses list for Jan-Jun 2023.

Sl. No.	Name of the Subject & Instructor	Duration in Weeks	Start Date	End Date	Exam Dates	Enrolment End	Intended Audience
1	Fundamentals of Theoretical and Experimental Aerodynamics Prof. Arnab Roy	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	UG/PG
2	Satellite Attitude Dynamics And Control Prof. Manoranjan Sinha	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	UG/PG
3	Instrumentation and Process Control in Food Industry Prof. Ashis Kumar Datta	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG
4	Novel Technologies For Food Processing And Shelf Life Extension Prof. Hari Niwas Mishra	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	UG
5	Machine Learning For Soil And Crop Management Prof. Somsubhra Chakraborty	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	UG
6	Nanotechnology In Agriculture Prof. Mainak Das	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG/PG
7	Bioelectrochemistry Prof. Mainak Das	4 Weeks	January 23, 2023	February 17, 2023	March 26, 2023	January 30, 2023	UG/PG
8	Cell Biology: Cellular organization, division and processes Prof. Shikha Laloraya	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG/PG
9	Host-Pathogen Interaction (Immunology) Prof. Himanshu Kumar	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	PG
10	Engineering Thermodynamics Prof. Jayant K. Singh	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG
11	Basic Principles and Calculations in Chemical Engineering	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG

Sl. No.	Name of the Subject & Instructor	Duration in Weeks	Start Date	End Date	Exam Dates	Enrolment End	Intended Audience
	Prof. Subrata Kumar Majumdar				2023		
12	Fluid Flow Operations Prof. Subrata Kumar Majumdar	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	UG
13	Computer Aided Applied Single Objective Optimization Prof. Prakash Kotecha	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG/PG
14	Process Control - Design, Analysis and Assessment Prof. Ragnathan Rengasamy	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	UG
15	Chemical Engineering Thermodynamics Prof. Sasidhar Gumma	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	UG
16	Electrochemical Technology in Pollution Control Prof. J. R. Mudakavi	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG/PG
17	Multiphase Flows Prof. Rajesh Kumar Upadhyay	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG/PG
18	Soft Nano Technology Prof. Rabibrata Mukherjee	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG/PG
19	Aspen Plus® simulation software - a basic course for beginners Prof. Prabirkumar Saha	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	UG/PG
20	Matlab Programming for Numerical Computation Prof. Niket Kaisare	12 Weeks (8 weeks + 4 weeks new)	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG/PG
21	Remote Sensing Essentials Prof. Arun K. Saraf	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG/PG
22	Geographic Information Systems Prof. Arun K. Saraf	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG/PG

Sl. No.	Name of the Subject & Instructor	Duration in Weeks	Start Date	End Date	Exam Dates	Enrolment End	Intended Audience
23	Remote Sensing and GIS for rural development Prof. Pennan Chinnasamy	12 weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG
24	Foundations of Cryptography Prof. Ashish Choudhury	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG/PG
25	Quantum Algorithms and Cryptography Prof. Shweta Agrawal	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG/PG
26	An Introduction to Artificial Intelligence Prof. Mausam	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG
27	Introduction to Embedded System Design Prof. Dhananjay V. Gadre Prof. Badri N Subudhi	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG/PG
28	Advanced Computer Architecture Prof. Smruti R.Sarangi	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	PG
29	Data Analytics with Python Prof. A. Ramesh	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	UG/PG
30	Artificial Intelligence: Knowledge Representation And Reasoning Prof. Deepak Khemani	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG/PG
31	Information Security - 5 - Secure Systems Engineering Prof. Chester Robeiro	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG/PG
32	Machine Learning,ML Prof. Carl Gustaf Jansson	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	PG
33	Programming, Data Structures And Algorithms Using Python Prof. Madhavan Mukund	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG
34	Design and analysis of algorithms Prof. Madhavan Mukund	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG
35	Data Science for Engineers Prof. Rangunathan Rengasamy	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG/PG

Sl. No.	Name of the Subject & Instructor	Duration in Weeks	Start Date	End Date	Exam Dates	Enrolment End	Intended Audience
	Prof. Shankar Narasimhan				2023		
36	Introduction to Machine Learning Prof. Balaraman Ravindran	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	UG/PG
37	Python for Data Science Prof. Ragnathan Rengasamy	4 Weeks	January 23, 2023	February 17, 2023	March 26, 2023	January 30, 2023	UG
38	Deep Learning - IIT Ropar Prof. Sudarshan Iyengar	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG/PG
39	Cloud Computing and Distributed Systems Prof. Rajiv Misra	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG/PG
40	Introduction to parallel programming with OpenMP and MPI Prof. Yogish Sabharwal	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG/PG
41	Fundamental Algorithms: Design And Analysis Prof. Sourav Mukhopadhyay	4 Weeks	January 23, 2023	February 17, 2023	March 26, 2023	January 30, 2023	UG/PG
42	Introduction To Soft Computing Prof. Debasis Samanta	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG/PG
43	Data Base Management System Prof. Partha Pratim Das Prof. Samiran Chattopadhyay	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG/PG
44	Cloud Computing Prof. Soumya Kanti Ghosh	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	UG
45	Data Mining Prof. Pabitra Mitra	8 Weeks	January 23, 2023	March 17, 2023	March 26, 2023	January 30, 2023	UG
46	Ethical Hacking Prof. Indranil Sengupta	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	UG/PG
47	Blockchain and its Applications Prof. Sandip Chakraborty Prof. Shamik Sural	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG/PG

Sl. No.	Name of the Subject & Instructor	Duration in Weeks	Start Date	End Date	Exam Dates	Enrolment End	Intended Audience
48	Computer Networks And Internet Protocol Prof. Soumya Kanti Ghosh Prof. Sandip Chakraborty	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG/PG
49	Introduction To Industry 4.0 And Industrial Internet Of Things Prof. Sudip Misra	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	PG
50	GPU Architectures And Programming Prof. Soumyajit Dey	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG/PG
51	Foundations of Cyber Physical Systems Prof. Soumyajit Dey	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG/PG
52	Microprocessors and Interfacing Prof. Shaik Rafi Ahamed	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	UG
53	Multirate DSP Prof. R. David Koilpillai	12 Weeks	January 23, 2023	April 14, 2023	April 29, 2023	January 30, 2023	UG/PG
54	VLSI Signal Processing Prof. Mrityunjoy Chakraborty	8 Weeks	February 20, 2023	April 14, 2023	April 29, 2023	February 20, 2023	UG/PG
55	Communication Networks Prof. Gautam Das	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	PG
56	Ethics In Engineering Practice Prof. Susmita Mukhopadhyay	8 Weeks	February 20, 2023	April 14, 2023	April 29, 2023	February 20, 2023	UG/PG
57	Advanced Robotics Prof. Ashish Dutta	12 Weeks	January 23, 2023	April 14, 2023	April 30, 2023	January 30, 2023	UG/PG