



VISVESVARAYA TECHNOLOGICAL UNIVERSITY, Belagavi
Proposed list of MOOCs (NPTEL June-Dec 2022 Timeline) for B.E Degree Honours

Bouquet of MOOCs Courses

Table 1. List of certifiable courses approved for earning the extra credits under type

Name of the Board		MECHANICAL ENGINEERING				
Sl. No.	Name of the Subject & Subject Matter Expert(SME)	Duration in Weeks	Start Date	End Date	Exam Dates	Enrolment End Date
1	Solid Mechanics Prof. Ajeet Kumar	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022
2	Joining Technologies for metals Prof. D K Dwivedi	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
3	Polymer Assisted Abrasive Finishing Processes Prof. M. Ravi Sankar	4 weeks	Jul 25, 2022	Aug 19, 2022	Sep 25, 2022	Aug 1, 2022
4	BioMEMS and Microfluidics Prof. Shantanu Bhattacharya	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
5	Engineering Fracture Mechanics Prof. K.Ramesh	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
6	Laser Based Manufacturing Prof. S. N. Joshi	8 Weeks	Aug 22, 2022	Oct 14, 2022	Oct 30, 2022	Aug 22, 2022
7	Mechanics and Control of Robotic Manipulators Prof. Santhakumar Mohan	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
8	Dynamics and Control of Mechanical Systems Prof. Ashitava Ghosal	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022
9	Advanced Fluid Mechanics Prof. Suman Chakraborty	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022
10	Energy Conservation And Waste Heat Recovery Prof. P. K. Das Prof. A Bhattacharya	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
11	Engineering Drawing And Computer Graphics Prof. Rajaram Lakkaraju	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022
12	Heat Exchangers: Fundamentals And Design Analysis Prof. Prasanta Kumar Das Prof. Indranil Ghosh	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
13	Mechanism And Robot Kinematics Prof. Anirvan Dasgupta	8 Weeks	Aug 22, 2022	Oct 14, 2022	Oct 30, 2022	Aug 22, 2022
14	Finite Element Method: Variational Methods to Computer Programming Prof. Atanu Banerjee Prof. Arup Nandy	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
15	Mathematical Modeling of Manufacturing Processes Prof. Swarup Bag	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
16	Advanced Machining Processes Prof. Manas Das	8 weeks	Aug 22, 2022	Oct 14, 2022	Oct 29, 2022	Aug 22, 2022



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17	Automation in Manufacturing Prof. Shrikrishna N. Joshi	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022
18	Advances in welding and joining technologies Prof. Swarup Bag	8 weeks	Aug 22, 2022	Oct 14, 2022	Oct 29, 2022	Aug 22, 2022
19	Aircraft Propulsion Prof. Vinayak N. Kulkarni	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022
2021	Biomechanics of Joints and Orthopaedic Implants Prof. Sanjay Gupta	8 Weeks	Aug 22, 2022	Oct 14, 2022	Oct 30, 2022	Aug 22, 2022
22	Design of Mechatronic Systems Prof. Prasanna Gandhi	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
23	Metal Additive Manufacturing Prof. Janakranjan Ramkumar Prof. Amandeep Singh Oberoi	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022
24	Selection Of Nanomaterials For Energy Harvesting And Storage Application Prof. Kaushik Pal	4 weeks	Jul 25, 2022	Aug 19, 2022	Sep 25, 2022	Aug 1, 2022
25	Structural Analysis of Nanomaterials Prof. Kaushik Pal	4 weeks	Jul 25, 2022	Aug 19, 2022	Sep 25, 2022	Aug 1, 2022
26	Work System Design Prof. Inderdeep Singh	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022
27	Product Design and Development Prof. Inderdeep Singh	4 weeks	Jul 25, 2022	Aug 19, 2022	Sep 25, 2022	Aug 1, 2022
28	Principles of Metal Forming Technology Prof. Pradeep kumar Jha	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
29	Engineering Graphics and Design Prof. Naresh Varma Datla Prof. S.R Kale	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022



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Table 2. List of certifiable courses approved for earning the extra credits by ME Students (Interdisciplinary)

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 Aircraft Design Prof. Rajkumar Pant	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
2	Space Flight Mechanics Prof. Manoranjan Sinha	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022
3	Farm Machinery Prof. Virendra Kumar Tewari	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
4	Modern Indian Architecture Prof. P.S. Chani	8 Weeks	Aug 22, 2022	Oct 14, 2022	Oct 29, 2022	Aug 22, 2022
5	Building Materials And Composites Prof. Sumana Gupta	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
6	Fundamentals of micro and nanofabrication Prof Sushobhan Avasti Prof. Shankar Selvaraja	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022
7	Technologies For Clean And Renewable Energy Production Prof. P. Mondal	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
8	Principles and Practices of Process Equipment and Plant Design Prof. Gargi Das Prof S Ray	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022
9	Thermal Processing of Foods Prof. R. Anandalakshmi	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
10	Equipment Design: Mechanical Aspects Prof. Shabina Khanam	4 Weeks	Jul 25, 2022	Aug 19, 2022	Sep 25, 2022	Aug 1, 2022
11	Project Planning & Control Prof. Koshy Varghese	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
12	Wastewater Treatment And Recycling Prof. Manoj Kumar Tiwari	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
13	Remote Sensing and GIS Prof. Rishikesh Bharti	8 weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
14	Artificial Intelligence : Search Methods For Problem solving Prof. Deepak Khemani	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
15	Programming, Data Structures And Algorithms Using Python Prof. Madhavan Mukund	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
16	Design and analysis of algorithms Prof. Madhavan Mukund	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
17	Data Science for Engineers Prof. Ragunathan Rengasamy Prof. Shankar Narasimhan	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
18	Introduction to Machine Learning Prof. Balaraman Ravindran	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022



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19	Python for Data Science Prof. Ragunathan Rengasamy	4 Weeks	Jul 25, 2022	Aug 19, 2022	Sep 25, 2022	Aug 1, 2022
20	Data Base Management System Prof. Partha Pratim Das Prof. Ansuman Banerjee Prof. Kausik Datta	8 Weeks	Aug 22, 2022	Oct 14, 2022	Oct 29, 2022	Aug 22, 2022
21	Innovation by Design Prof. B. K. Chakravarthy	4 weeks	Jul 25, 2022	Aug 19, 2022	Sep 25, 2022	Aug 1, 2022
22	Design, Technology and Innovation Prof. B. K. Chakravarthy	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
23	Environmental & Resource Economics Prof. Sabuj Kumar Mandal	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
24	Body language: Key to professional Success Prof. Rashmi Gaur	4 weeks	Aug 22, 2022	Sep 16, 2022	Oct 29, 2022	Aug 22, 2022
25	Patent Law for Engineers and Scientists Prof. Feroz Ali	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
26	Energy Economics And Policy Prof. Shyamasree Dasgupta	8 Weeks	Aug 22, 2022	Oct 14, 2022	Oct 30, 2022	Aug 22, 2022
27	Decision-Making Under Uncertainty Prof. N. Gautam	4 weeks	Aug 22, 2022	Sep 16, 2022	Oct 30, 2022	Aug 22, 2022
28	Financial Accounting Prof. Varadraj Bapat	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
29	Cost Accounting Prof. Varadraj Bapat	4 weeks	Jul 25, 2022	Aug 19, 2022	Sep 25, 2022	Aug 1, 2022
30	Management Accounting Prof. Anil K. Sharma	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
31	Toyota Production System Prof. Rajat Agarwal	8 Weeks	Aug 22, 2022	Oct 14, 2022	Oct 29, 2022	Aug 22, 2022
32	Innovation, Business Models and Entrepreneurship Prof. Rajat Agarwal Prof. Vinay Sharma	8 Weeks	Aug 22, 2022	Oct 14, 2022	Oct 30, 2022	Aug 22, 2022
33	Operations and supply chain management Prof. G. Srinivasan	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
34	Organizational Behaviour Prof. M. P. Ganesh	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
35	The Future of Manufacturing Business: Role of Digital Technologies Prof. R. K. Amit Prof. U. Chandrasekhar	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
36	Automation in Production Systems and Management Prof. Pradip Kumar Ray	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022
37	Commodity Derivatives And Risk Management Prof. Prabina Rajib	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022



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38	Industrial Safety Engineering Prof. Jhareswar Maiti	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
39	Human Factors Engineering Prof. Pradip Kumar Ray Prof. Virendra Kumar Tewari	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022
40	Stress Management Prof. Rajlakshmi Guha	4 Weeks	Aug 22, 2022	Sep 16, 2022	Oct 29, 2022	Aug 22, 2022
41	Regression Analysis Prof. Soumen Maity	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
42	Introduction to Probability Theory and Stochastic Processes Prof. S Dharmaraja	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022
43	Aluminium based Alloys and Metal Matrix Composites Prof. Ranjit Bauri	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022
44	Marine Propulsion Prof. Anirban Bhattacharyya	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
45	Numerical Methods And Simulation Techniques For Scientists And Engineers Prof. Saurabh Basu	8 weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022
46	Physics of Renewable Energy Systems Prof. Amreesh Chandra	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022