



VISVESVARAYA TECHNOLOGICAL UNIVERSITY, Belagavi
Proposed list of MOOCs (NPTEL July-Dec 2021 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	Heat Exchangers: Fundamentals and Design Analysis Prof. Prasanta Kr Das Prof. Indranil Ghosh	12 Weeks	July 26, 2021	October 15, 2021	October 23, 2021	August 02, 2021
2	Advances in welding and joining technologies Prof. Swarup Bag	8 Weeks	July 26, 2021	September 17, 2021	September 26, 2021	August 02, 2021
3	Product Design and Development Prof. Inderdeep Singh	4 Weeks	July 26, 2021	August 20, 2021	September 26, 2021	August 02, 2021
4	Work System Design Prof. Inderdeep Singh	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
5	Advanced Dynamics Prof. Anirvan DasGupta	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
6	Foundations of Cognitive Robotics Prof. Bishakh Bhattacharya	4 Weeks	July 26, 2021	August 20, 2021	September 26, 2021	August 02, 2021
7	Polymer Assisted Abrasive Finishing Processes Prof. M. Ravi Sankar	4 Weeks	July 26, 2021	August 20, 2021	September 26, 2021	August 02, 2021
8	Rapid Manufacturing Prof. J. Ramkumar Prof. Amandeep Singh	12 Weeks	July 26, 2021	October 15, 2021	October 23, 2021	August 02, 2021
9	RAC Product Design Prof. Sanjeev Jain	4 Weeks	July 26, 2021	August 20, 2021	September 26, 2021	August 02, 2021
10	Foundations of Computational Materials Modelling Prof. Narasimhan Swaminathan	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
11	Mechanics and Control of Robotic Manipulators Prof. Santhakumar Mohan	8 Weeks	August 23, 2021	October 15, 2021	October 23, 2021	August 23, 2021
12	Fundamentals of Additive Manufacturing Technologies Prof. Sajan Kapil	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
13	Design of Mechatronic Systems Prof. Prasanna Gandhi	12 Weeks	July 26, 2021	October 15, 2021	October 23, 2021	August 02, 2021
14	Biomechanics of Joints and Orthopaedic Implants Prof. Sanjay Gupta	8 Weeks	August 23, 2021	October 15, 2021	October 24, 2021	August 23, 2021
15						



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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	Aircraft Stability and Control Prof. A. K. Ghosh	12 Weeks	July 26, 2021	October 15, 2021	October 23, 2021	August 02, 2021
2	Introduction to Aircraft Design Prof. Rajkumar Pant	12 Weeks	July 26, 2021	October 15, 2021	October 23, 2021	August 02, 2021
3	Thermal Operations in Food Process Engineering: Theory and Applications Prof. Tridib Kumar Goswami	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
4	Farm Machinery Prof. VK Tewari	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
5	Thermal Processing of Foods Prof. R. Anandalakshmi	12 Weeks	July 26, 2021	October 15, 2021	October 23, 2021	August 02, 2021
6	Introduction to mechanobiology Prof. Shamik Sen	8 Weeks	July 26, 2021	September 17, 2021	September 26, 2021	August 02, 2021
7	Fundamentals of micro and nanofabrication Prof. Sushobhan avasthi Prof. Shankar Selvaraja	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
8	Introduction to Dynamical Models in Biology Prof. Biplab Bose	4 Weeks	August 23, 2021	September 17, 2021	October 24, 2021	August 23, 2021
9	Natural Gas Engineering Prof. Pankaj Tiwari	8 Weeks	July 26, 2021	September 17, 2021	September 26, 2021	August 02, 2021
10	Polymers: concepts, properties, uses and sustainability Prof. Abhijit P Deshpande	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
11	Material & Energy Balance Computations Prof. Arnab Atta Prof. Rabibrata Mukherjee	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
12	Flow Through Porous Media Prof. Somenath Ganguly	12 Weeks	July 26, 2021	October 15, 2021	October 23, 2021	August 02, 2021
13	Sustainable Engineering Concepts and Life Cycle Analysis Prof. Brajesh Kumar Dubey	8 Weeks	July 26, 2021	September 17, 2021	September 26, 2021	August 02, 2021
14	Glass Processing Technology Prof. K N Satyanarayana Prof. E. Rajasekar	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
15	Remote Sensing and GIS Prof. Rishikesh Bharti	8 Weeks	July 26, 2021	September 17, 2021	September 26, 2021	August 02, 2021
16	Introduction to internet of things Prof. Sudip Misra	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
17	Introduction to Industry 4.0 and Industrial Internet of Things Prof. Sudip Misra	12 Weeks	July 26, 2021	October 15, 2021	October 23, 2021	August 02, 2021



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18	Data Science for Engineers Prof. Ragunathan Rengasamy Prof. Shankar Narasimhan	8 Weeks	July 26, 2021	September 17, 2021	September 26, 2021	August 02, 2021
19	Introduction to Machine Learning – IITM Prof. Balaraman Ravindran	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
20	Python for Data Science Prof. Ragunathan Rengasamy	4 Weeks	July 26, 2021	August 20, 2021	September 26, 2021	August 02, 2021
21	System Design for Sustainability Prof. Sharmistha Banerjee	12 Weeks	July 26, 2021	October 15, 2021	October 23, 2021	August 02, 2021
22	Ergonomics Workplace Analysis Prof. Urmi R. Salve	4 Weeks	August 23, 2021	September 17, 2021	October 23, 2021	August 23, 2021
23	Functional and Conceptual Design Prof. Asokan T	12 Weeks	July 26, 2021	October 15, 2021	October 23, 2021	August 02, 2021
24	Energy Economics And Policy Prof. Shyamasree Dasgupta	8 Weeks	August 23, 2021	October 15, 2021	October 24, 2021	August 23, 2021
25	Right to Information and Good Governance Prof. Sairam Bhat	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
26	Human resource development Prof. KBL Srivastava	12 Weeks	July 26, 2021	October 15, 2021	October 23, 2021	August 02, 2021
27	Toyota Production System Prof. Rajat Agarwal	8 Weeks	August 23, 2021	October 15, 2021	October 23, 2021	August 23, 2021
28	Decision-Making Under Uncertainty Prof. N. Gautam	4 Weeks	August 23, 2021	September 17, 2021	October 24, 2021	August 23, 2021
29	Operations and supply chain management Prof. G. Srinivasan	12 Weeks	July 26, 2021	October 15, 2021	October 23, 2021	August 02, 2021
30	Infrastructure Planning and Managements Prof. Ashwin Mahalingam	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
31	Organizational Behaviour Prof. M. P. Ganesh	12 Weeks	July 26, 2021	October 15, 2021	October 23, 2021	August 02, 2021
32	The Future of Manufacturing Business: Role of Digital Technologies Prof. R. K. Amit Prof. U. Chandrasekhar	8 Weeks	July 26, 2021	September 17, 2021	September 26, 2021	August 02, 2021
33	Sustainability through Green Manufacturing Systems: An Applied Approach Prof. Deepu Philip Prof. Amandeep Singh	8 Weeks	August 23, 2021	October 15, 2021	October 23, 2021	August 23, 2021



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Sl. No.	Name of the Subject & Subject Matter Expert(SME)	Duration in Weeks	Start Date	End Date	Exam Dates	Enrolment End Date
34	Welding of Advanced High Strength Steels for Automotive Applications Prof. Murugaiyan Amirthalingam	4 Weeks	July 26, 2021	August 20, 2021	September 26, 2021	August 02, 2021
35	Structural Analysis of Nanomaterials Prof. Kaushik Pal	4 Weeks	July 26, 2021	August 20, 2021	September 26, 2021	August 02, 2021
36	Corrosion Failures and Analysis Prof. Kallol Mondal	8 Weeks	July 26, 2021	September 17, 2021	September 26, 2021	August 02, 2021
37	Stress Management Prof. Rajlakshmi Guha	4 Weeks	July 26, 2021	August 20, 2021	September 26, 2021	August 02, 2021
38	Fundamentals Of Artificial Intelligence Prof. Shyamanta M. Hazarika	12 Weeks	July 26, 2021	October 15, 2021	October 23, 2021	August 02, 2021
39	Essential Mathematics for Machine Learning Prof. Sanjeev Kumar Prof. S.K. Gupta	8 Weeks + 4 Weeks new	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
40	Computational Physics Prof. Apratim Chatterji Prof. Prasenjit Ghosh	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021
41	Physics of Renewable Energy Systems Prof. Amreesh Chandra	12 Weeks	July 26, 2021	October 15, 2021	October 24, 2021	August 02, 2021