



**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				
<b>S No</b>	<b>Course Name and SME Name</b>	<b>Duration</b>	<b>Start date</b>	<b>End date</b>	<b>Exam date</b>	<b>Enrollme nt End date</b>
01	Acoustic Materials and Metamaterials Prof. Sneha Singh	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
02	Fundamentals of Surface Engineering: Mechanisms, Processes and Characterizations Prof. D. K. Dwivedi	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
03	Turbulent Combustion: Theory And Modelling Prof. Ashoke De	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
04	Product Design and Manufacturing Prof. J.Ramkumar Prof. Amandeep Singh	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
05	Introduction To Mechanical Micro Machining Prof. Ajay M Sidpara	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
06	Smart Materials and Intelligent System Design Prof. Bishakh Bhattacharya	4 Weeks	February 21, 2022	March 18, 2022	April 24, 2022	February 21, 2022
07	Modelling and Simulation of Dynamic Systems Prof. Pushparaj Mani Pathak	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
08	Fundamental of Welding Science and Technology Prof. Pankaj Biswas	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
09	Introduction to Abrasive Machining and Finishing Processes Prof. Mamilla Ravi Sankar	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
10	Traditional And Non-Traditional Optimization Tools Prof. Dilip Kumar Pratihar	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
11	Two phase flow and heat transfer Prof. Arup Kumar Das	4 Weeks	January 24, 2022	February 18, 2022	March 27, 2022	January 31, 2022
12	Applied Ergonomics Prof. Shantanu Bhattacharya Prof. Ankur Gupta	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
13	Fundamentals of combustion for propulsion	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022

<b>S No</b>	<b>Course Name and SME Name</b>	<b>Duration</b>	<b>Start date</b>	<b>End date</b>	<b>Exam date</b>	<b>Enrollment End date</b>
	Prof. S.Varunkumar Prof. H.S.Mukunda					
14	Sound and Structural Vibration Prof. Venkata R. Sonti	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
15	Explosions and Safety Prof. K. Ramamurthi Prof. Prasad Patnaik BSV	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
16	Wheeled Mobile Robots Prof. Asokan Thondiyath Prof. Santhakumar Mohan	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
17	Mechanics of Fiber Reinforced Polymer Composite Structures Prof. Debabrata Chakraborty	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
18	Heat Transfer and Combustion in Multiphase Systems Prof. Saptarshi Basu	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
19	Finite element modeling of welding processes Prof. Swarup Bag	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
20	Nonlinear Vibration Prof. S. K. Dwivedy	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
21	Viscous Fluid Flow Prof. Amaresh Dalal	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
22	Noise Management & Control Prof. Nachiketa Tiwari	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
23	Inspection and Quality Control in Manufacturing Prof. Kaushik Pal	4 Weeks	February 21, 2022	March 18, 2022	April 23, 2022	February 21, 2022
24	Tools in Scientific Computing Prof. Aditya Bandopadhyay	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
25	Machinery Fault Diagnosis and Signal Processing Prof. Amiya Ranjan Mohanty	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
26	Electronic Packaging and Manufacturing Prof. Anandaroop Bhattacharya Prof. Goutam Chakraborty	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
27	Gear And Gear Unit Design: Theory and Practice Prof. Rathindra Nath Maiti	8 Weeks	February 21, 2022	April 15, 2022	April 23, 2022	February 21, 2022
28	Introduction To Uncertainty Analysis And Experimentation Prof. S.R. Kale	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022



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Proposed list of MOOCs (NPTEL July-Dec 2021 Timeline) for B.E Degree Honours

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

S No	Course Name and SME Name	Duration	Start date	End date	Exam date	Enrollment End date
01	Aircraft Design Prof. A.K.Ghosh	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
02	Introduction to Experiments in Flight Prof. A.K.Ghosh	4 Weeks	February 21, 2022	March 18, 2022	April 23, 2022	February 21, 2022
03	Rocket Propulsion Prof. K. Ramamurthi Prof. V. Nagabhushana Rao	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
04	Computational Science in Engineering Prof. Ashoke De	8 Weeks	February 21, 2022	April 15, 2022	April 23, 2022	February 21, 2022
05	Gasdynamics: Fundamentals and Applications Prof. Srisha Rao M V	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
06	Fundamentals of Theoretical and Experimental Aerodynamics Prof. Arnab Roy	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
07	Instrumentation and Process Control in Food Industry Prof. Ashis Kumar Datta	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
08	Disaster Recovery and Build Back Better Prof. Ram Sateesh Pasupuleti Prof. Subhojyothi Samaddar	8 Weeks	February 21, 2022	April 15, 2022	April 24, 2022	February 21, 2022
09	Biostatistics and Design of experiments Prof. Mukesh Doble	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
10	Thermodynamics for Biological Systems : Classical and Statistical Aspect Prof. G. K. Suraishkumar Prof. Sanjib Senapati	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
11	Waste to Energy Conversion Prof. P. Mondal	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
12	Biomass Conversion and Biorefinery Prof. Kaustubha Mohanty	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
13	Remote Sensing Essentials Prof. Arun K. Saraf	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022

<b>S No</b>	<b>Course Name and SME Name</b>	<b>Duration</b>	<b>Start date</b>	<b>End date</b>	<b>Exam date</b>	<b>Enrollment End date</b>
14	Electronic Waste Management - Issues And Challenges Prof. Brajesh Kumar Dubey	4 Weeks	January 24, 2022	February 18, 2022	March 27, 2022	January 31, 2022
15	Remote Sensing: Principles and Applications Prof. Eswar Rajasekaran	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
16	Fundamental Algorithms: Design and Analysis Prof. Sourav Mukhopadhyay	4 Weeks	February 21, 2022	March 18, 2022	April 24, 2022	February 21, 2022
17	Data Analytics with Python Prof. A. Ramesh	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
18	Machine Learning, ML Prof. Carl Gustaf Jansson Prof. Henrik Boström Prof. Fredrik Kilander	8 Weeks	February 21, 2022	April 15, 2022	April 24, 2022	February 21, 2022
19	Programming, Data Structures And Algorithms Using Python Prof. Madhavan Mukund	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
20	Design and analysis of algorithms Prof. Madhavan Mukund	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
21	Data Science for Engineers Prof. Ragunathan Rengasamy Prof. Shankar Narasimhan	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
22	Introduction to Machine Learning Prof. Balaraman Ravindran	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
23	Data Base Management System Prof. Partha Pratim Das Prof. Samiran Chattopadhyay	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
24	Introduction To Industry 4.0 And Industrial Internet Of Things Prof. Sudip Misra	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
25	Introduction To Internet Of Things Prof. Sudip Misra	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
26	Innovation by Design Prof. B. K. Chakravarthy	4 Weeks	February 21, 2022	March 18, 2022	April 24, 2022	February 21, 2022
27	Design, Technology and Innovation Prof. B. K. Chakravarthy	8 Weeks	February 21, 2022	April 15, 2022	April 23, 2022	February 21, 2022
28	Sensors and Actuators Prof. Hardik Jeetendra Pandya	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022

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29	Electric Vehicles - Part 1 Prof. Amit Jain	4 Weeks	February 21, 2022	March 18, 2022	April 24, 2022	February 21, 2022
30	Patent Law for Engineers and Scientists Prof. Feroz Ali	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
31	Energy Resources, Economics and Environment Prof. Rangan Banerjee	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
32	Data Analysis and Decision Making - I Prof. Raghu Nandan Sengupta	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
33	Data Analysis & Decision Making - II Prof. Raghu Nandan Sengupta	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
34	Quality Design And Control Prof. Pradip Kumar Ray	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
35	Management of Inventory Systems Prof. Pradip Kumar Ray	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
36	Design Thinking - A Primer Prof. Ashwin Mahalingam Prof. Bala Ramadurai	4 Weeks	February 21, 2022	March 18, 2022	April 23, 2022	February 21, 2022
37	Six Sigma Prof. Jitesh J Thakkar	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
38	Ethics In Engineering Practice Prof. Susmita Mukhopadhyay	8 Weeks	February 21, 2022	April 15, 2022	April 23, 2022	February 21, 2022
39	Safety and Risk Analytics Prof. Jhareswar Maiti	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
40	Scientific Computing using Matlab Prof. Mani Mehra Prof. Vivek Kumar Aggarwal	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
41	Welding Processes Prof. Murugaiyan Amirthalingam	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
42	Solar Photovoltaics: Principles, Technologies & Materials Prof. Ashish Garg	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
43	Fundamentals Of Electronic Materials And Devices Prof. Parasuraman Swaminathan	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022

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44	Steel Quality: Role of Secondary Refining & Continuous Casting Prof. Santanu Kr. Ray	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
45	Material Characterization Prof.S. Sankaran	12 Weeks	January 24, 2022	April 15, 2022	April 23, 2022	January 31, 2022
46	Corrosion - Part I Prof. Kallol Mondal	8 Weeks	January 24, 2022	March 18, 2022	March 27, 2022	January 31, 2022
47	Introduction to Environmental Engineering and Science - Fundamental and Sustainability Concepts Prof. Brajesh Kumar Dubey	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022
48	Statistical Mechanics Prof. Dipanjan Chakraborty	12 Weeks	January 24, 2022	April 15, 2022	April 24, 2022	January 31, 2022

