



TULSIRAMJI GAIKWAD-PATIL College of Engineering and Technology
Wardha Road, Nagpur - 441108
Accredited with NAAC A+ Grade
Approved by AICTE, New Delhi, Govt. of Maharashtra
(An Autonomous Institution Affiliated to RTM Nagpur University, Nagpur)



Department of Mechanical Engineering

Video Lectures Recorded

Sr. No.	Name of Subject	Name of Faculty	Name of Topic	Link of Youtube Lectuer
1	Engineering Thermodynamics	Mr.Ravindra Shende	Zeroth law of Thermodynamics	https://youtu.be/90_I65js2kw
2	Engineering Thermodynamics	Mr.Ravindra Shende	Numerical on First law of Thermodynamics	https://youtu.be/88d7XK8-CGs
3	Engineering Thermodynamics	Mr.Ravindra Shende	Steady flow Energy Equation for Nozzle	https://youtu.be/R3KKxHkIk60
4	Engineering Thermodynamics	Mr.Ravindra Shende	Heat Transfer in various processes	https://youtu.be/5Kd3izbR4CM
5	Engineering Thermodynamics	Mr.Ravindra Shende	Application of Steady flow energy equation	https://youtu.be/88d7XK8-CGs
6	Engineering Thermodynamics	Mr.Ravindra Shende	Concept of Thermal Equilibrium	https://youtu.be/90_I65js2kw
7	Engineering Thermodynamics	Mr.Ravindra Shende	Steam Nozzle	https://youtu.be/EmobmjJ04L8
8	Engineering Thermodynamics	Mr.Ravindra Shende	Second law of Thermodynamics	https://youtu.be/NJmHYtMgEYs
9	Engineering Thermodynamics	Mr.Ravindra Shende	Heat Engine, Heat pump and refrigerator	https://youtu.be/p6Wgl-acO7g
10	Engineering Thermodynamics	Mr.Ravindra Shende	Relationship between COP of Heat pump and COP of Refrigerator	https://youtu.be/IQaNcYD7CI4
11	Engineering Thermodynamics	Mr.Ravindra Shende	Carnot Cycle	https://youtu.be/DpxVUVBWYBQ
12	Engineering Thermodynamics	Mr.Ravindra Shende	Numerical on Heat Engine	https://youtu.be/J7N73c4erGE
13	Engineering Thermodynamics	Mr.Ravindra Shende	Derivation of intermediate temperature of Heat Engine	https://youtu.be/UuOW4a1y5HQ
14	Engineering Thermodynamics	Mr.Ravindra Shende	Concept of Clausius Inequality	https://youtu.be/Jgj3_PFKx3s
15	Engineering Thermodynamics	Mr.Ravindra Shende	Basic Concept of Entropy	https://youtu.be/SGa8Bnr_QGM
16	Engineering Thermodynamics	Mr.Ravindra Shende	Dryness fraction	https://youtu.be/byuFCx58834
17	Engineering Thermodynamics	Mr.Ravindra Shende	Triple Point of water	https://youtu.be/KNI4Wj6u7d8
18	Engineering Thermodynamics	Mr.Ravindra Shende	Specific volume of Mixture	https://youtu.be/byuFCx58834
19	Engineering Thermodynamics	Mr.Ravindra Shende	Mollier Diagram	https://youtu.be/YwoiYrA_ugY
20	Manufacturing Processes	Mr.Ashwadeep Fulzele	Introduction to Abrasive Machining Processes	https://youtu.be/NEVMm3ykgvQ

21	Manufacturing Processes	Mr.Ashwadeep Fulzele	Grinding Machine	https://youtu.be/2A2oP1BKQMo
22	Manufacturing Processes	Mr.Ashwadeep Fulzele	MP Pract 1 Lathe Machine- Construction	https://youtu.be/6WxXW2OInIE
23	Manufacturing Processes	Mr.Ashwadeep Fulzele	Abrasives in grinding	https://youtu.be/_Pm3SnsKSw
24	Manufacturing Processes	Mr.Ashwadeep Fulzele	Adhesives Bonds and Grain size in Grinding	https://youtu.be/AITBsGSgAsE
25	Manufacturing Processes	Mr.Ashwadeep Fulzele	Types of Grinding Wheel; s & Marking System	https://youtu.be/ClrTxg6TBrQ
26	Manufacturing Processes	Mr.Ashwadeep Fulzele	Cutting Process in Grinding	https://youtu.be/OVCdizG4TTw
27	Manufacturing Processes	Mr.Ashwadeep Fulzele	Other superfinishing process & Problems in grinding	https://youtu.be/vCqBQeh-7nk
28	Manufacturing Processes	Mr.Ashwadeep Fulzele	MP Pract 2 Taper Turning Operation	https://youtu.be/9PRtBjTgYlo
29	Manufacturing Processes	Mr.Ashwadeep Fulzele	MP pract 3 Drilling Operation on Lathe	https://youtu.be/jbHYfi_sC-c
30	Mechatronics	Mrs.Shubhangi Gondane	Introduction of Mechatronics	https://youtu.be/DHWa35oEyM0
31	Mechatronics	Mrs.Shubhangi Gondane	Control System	https://youtu.be/7m3iflBLvIw
32	Mechatronics	Mrs.Shubhangi Gondane	Feedback control system	https://youtu.be/Rpc7oFRa8IM
33	Mechatronics	Mrs.Shubhangi Gondane	Generalized Measurement system	https://youtu.be/F5qaYeip0rY
34	Mechatronics	Mrs.Shubhangi Gondane	Anti Braking system (ABS)	https://youtu.be/W5y6vAWRnw8
35	Mechatronics	Mrs.Shubhangi Gondane	Automatic Parking System (APS)	https://youtu.be/ET0taVeGIGw
36	Mechatronics	Mrs.Shubhangi Gondane	Auto - polit and Tilting of train	https://youtu.be/up9Wcl-GJeI
37	Mechatronics	Mrs.Shubhangi Gondane	Data Acquisition System	https://youtu.be/wuDgIjPMyDk
38	Mechatronics	Mrs.Shubhangi Gondane	Introduction of data logger	https://youtu.be/AfT5WQ-Zj9E
39	Mechatronics	Mrs.Shubhangi Gondane	Peripheral Interfacing adopter (PIA)	https://youtu.be/MYSQxkBHG2E
40	Mechatronics	Mrs.Shubhangi Gondane	Introduction of SCADA	https://youtu.be/qtFJ5GQLHSE
41	Mechatronics	Mrs.Shubhangi Gondane	Variable Frequency drive (VFD)	https://youtu.be/IESNK3cHJQ8
42	Mechatronics	Mrs.Shubhangi Gondane	Data signal Processing (DSP)	https://youtu.be/IA7JYe4k5o
43	Mechatronics	Mrs.Shubhangi Gondane	Analog to Digital Converter	https://youtu.be/D-tCVnpq2I
44	Mechatronics	Mrs.Shubhangi Gondane	Digital to Analog Converter	https://youtu.be/-xPUJCgTQeM
45	Mechatronics	Mrs.Shubhangi Gondane	Electrical Actuation System	https://youtu.be/wtXCh-fXQJI
46	Mechatronics	Mrs.Shubhangi Gondane	Introduction of DC motor	https://youtu.be/5hlqPIQ9On0
47	Mechatronics	Mrs.Shubhangi Gondane	Introduction of Stepper Motor	https://youtu.be/EdXdIRII21A
48	Mechatronics	Mrs.Shubhangi Gondane	Mechanical Actuation System	https://youtu.be/TJVuy2sO2-E

49	Mechatronics	Mrs.Shubhangi Gondane	Pneumatic and Hydraulic Actuation System	https://youtu.be/xkQwVlhHnaY
50	Mechatronics	Mrs.Shubhangi Gondane	Basic of Logic Gate System	https://youtu.be/ILY0_4W9NLg
51	Mechatronics	Mrs.Shubhangi Gondane	Introduction of Karnaugh Map	https://youtu.be/tafqIMvGZEM
52	Mechatronics	Mrs.Shubhangi Gondane	Microprocessor 8085	https://youtu.be/NknXqZKkx1M
53	Mechatronics	Mrs.Shubhangi Gondane	Decimal to Octal conversion	https://youtu.be/4n4vNM0Ycf4
54	Mechatronics	Mrs.Shubhangi Gondane	Conversion of Binary number into hexadecimal	https://youtu.be/3DGkCi1xQuM
55	Mechatronics	Mrs.Shubhangi Gondane	Conversion of Decimal number into binary number	https://youtu.be/aVQ7S0qYUaI
56	Control System and Mectronics	Ms.Dipali Bhoyar	Control System and its types	https://youtu.be/PcP8SARGFgg
57	Control System and Mectronics	Ms.Dipali Bhoyar	Signal Flow Graph-Numerical	https://youtu.be/hcegYVLxVT8
58	Control System and Mectronics	Ms.Dipali Bhoyar	Block Diagram Reduction Technic Numerical	https://youtu.be/rbW_0DX_Jf0
59	Control System and Mectronics	Ms.Dipali Bhoyar	Block Diagram Reduction Technic Numerical	https://youtu.be/d1Hdf8GGu6Y
60	Control System and Mectronics	Ms.Dipali Bhoyar	Signal Flow Graph-Numerical	https://youtu.be/_l6w5pOUUPY
61	Control System and Mectronics	Ms.Dipali Bhoyar	Transient Response Analysis	https://youtu.be/bwMNaVgh1hU
62	Control System and Mectronics	Ms.Dipali Bhoyar	Block Diagram Reduction Technic Numerical	https://youtu.be/OhXSEMkY1zs
63	Control System and Mectronics	Ms.Dipali Bhoyar	Transient Response Analysis	https://youtu.be/TWHtvFazp9I
64	Control System and Mectronics	Ms.Dipali Bhoyar	Signal Flow Graph-Numerical	https://youtu.be/7c3kf4CbHWc
65	Control System and Mectronics	Ms.Dipali Bhoyar	Mathematical Stability	https://youtu.be/zU5syd2szII
66	Control System and Mectronics	Ms.Dipali Bhoyar	Mathematical Stability	https://youtu.be/eIDf6QIUjmU
67	Control System and Mectronics	Ms.Dipali Bhoyar	Mathematical Stability	https://youtu.be/eIDf6QIUjmU
68	Control System and Mectronics	Ms.Dipali Bhoyar	Mathematical Stability	https://youtu.be/wFuQX-58C6c
69	Control System and Mectronics	Ms.Dipali Bhoyar	Transient Response Analysis	https://youtu.be/jJCQCAk3zRU
70	Control System and Mectronics	Ms.Dipali Bhoyar	Mathematical Stability	https://youtu.be/YTLpRSM7c_Q
71	Control System and Mectronics	Ms.Dipali Bhoyar	Transient Response Analysis-part-1	https://youtu.be/lDv72yiBWkM
72	Control System and Mectronics	Ms.Dipali Bhoyar	Transient Response Analysis-part-2	https://youtu.be/n90i0_FsQ_U
73	Control System and Mectronics	Ms.Dipali Bhoyar	Steady State Error-Numerical Theory	https://youtu.be/OiBD4L4p6Kc
74	Control System and Mectronics	Ms.Dipali Bhoyar	Steady State Error-Numerical-1	https://youtu.be/KtX4C5vSKeY
75	Control System and Mectronics	Ms.Dipali Bhoyar	Steady State Error-Numerical-2	https://youtu.be/sV7PW4hTTuo

76	Control System and Mectronics	Ms.Dipali Bhoyar	Steady State Error- Numerical-3	https://youtu.be/QnRw2slqufg
77	Control System and Mectronics	Ms.Dipali Bhoyar	Root Locus Numerical-1	https://youtu.be/0nittq3eFBU
78	Control System and Mectronics	Ms.Dipali Bhoyar	Root Locus Numerical-3	https://youtu.be/DWzF3qO-kag
79	Control System and Mectronics	Ms.Dipali Bhoyar	Root Locus Numerical-2	https://youtu.be/hlXs3nicdPc
80	Control System and Mectronics	Ms.Dipali Bhoyar	Root Locus Numerical-4	https://youtu.be/A5XWvLJEHMQ
81	Control System and Mectronics	Ms.Dipali Bhoyar	Root Locus Numerical-5	https://youtu.be/WCXwXugab-8
82	Control System and Mectronics	Ms.Dipali Bhoyar	Bode Plot-Numerical-1	https://youtu.be/-FRlhvfU8mU
20	Control System and Mectronics	Ms.Dipali Bhoyar	Inverse Bode Plot Numerical-01	https://youtu.be/cQt5II81Yao
21	Control System and Mectronics	Ms.Dipali Bhoyar	Inverse Bode Plot Numerical-02	https://youtu.be/HnKJnfViRA8
22	Control System and Mectronics	Ms.Dipali Bhoyar	Inverse Bode Plot Numerical-03	https://youtu.be/RiUpxcUqVTw
23	Control System and Mectronics	Ms.Dipali Bhoyar	Inverse Bode Plot Numerical-03	https://youtu.be/xjKcNW1Vl8M
24	Control System and Mectronics	Ms.Dipali Bhoyar	Bode Plot-Numerical-2	https://youtu.be/UJTSGs6NEDQ
25	Control System and Mectronics	Ms.Dipali Bhoyar	Bode Plot-Numerical-3	https://youtu.be/tnQ22O5In2Y
26	Control System and Mectronics	Ms.Dipali Bhoyar	Bode Plot-Numerical-4	https://youtu.be/4DMUZeETIAg
27	Control System and Mectronics	Ms.Dipali Bhoyar	State Space Model	https://youtu.be/Bmo0mS648nk
28	Control System and Mectronics	Ms.Dipali Bhoyar	State Space Model- Transfer Function	https://youtu.be/vq29r1g9Zcw
29	Control System and Mectronics	Ms.Dipali Bhoyar	State Transition Matrix	https://studio.youtube.com/video/tw0foONmqYs/translations
30	Control System and Mectronics	Ms.Dipali Bhoyar	Controlability and observeability	https://studio.youtube.com/video/NfDwZ5TmGDE/translations
31	Operation Reserach	Mr.Vivek Patil	Numerical on Simplex Method	https://youtu.be/QtfyXPpEsIE
32	Operation Reserach	Mr.Vivek Patil	Numerical on Simplex Method (Graphical)	https://youtu.be/CHDwxlXYuMI
33	Operation Reserach	Mr.Vivek Patil	Numerical on Simplex Method (Graphical)	https://youtu.be/OJlgni-fGNk
34	Operation Reserach	Mr.Vivek Patil	Numerical on Assignment Problem	https://youtu.be/HmsQE_hOPdM
35	Operation Reserach	Mr.Vivek Patil	Numerical on Assignment Problem	https://youtu.be/tvnbsYvDyd0
36	Operation Reserach	Mr.Vivek Patil	Numerical on Transportatation Problem	https://youtu.be/5xCUzCTjAXQ
37	Operation Reserach	Mr.Vivek Patil	Numerical on Transportatation Problem	https://youtu.be/j3mQq90hz-M
38	Operation Reserach	Mr.Vivek Patil	Numerical on Individual Replacement	https://youtu.be/8GSd6WgZz4s
39	Operation Reserach	Mr.Vivek Patil	Numerical on Individual Replacement	https://youtu.be/fw5VYQqcSpY
40	Operation Reserach	Mr.Vivek Patil	Numerical on Group Replacement	https://youtu.be/TQnaMAYm9AU
41	Operation	Mr.Vivek Patil	Numerical on Group	https://youtu.be/GOiZ_b919dE

	Reserach		Replacement	
42	Dynamics of Machines	Mr vijay talodhikar	gyroscope	https://youtu.be/UjXXzrkaP5U
43	Dynamics of Machines	Mr vijay talodhikar	Whirling speed of shaft	https://youtu.be/1OEBleDVEvg
44	Dynamics of Machines	Mr vijay talodhikar	Cam follower displacement diagram	https://youtu.be/UHQdk6fTay0
45	Dynamics of Machines	Mr vijay talodhikar	types of governer	https://youtu.be/rFr3rUoC4Ug
46	Dynamics of Machines	Mr vijay talodhikar	Cam follower concept	https://youtu.be/95P5cDCAkao
47	Dynamics of Machines	Mr vijay talodhikar	Longitudinal vibration	https://youtu.be/GWHSr5MAF8I
48	Dynamics of Machines	Mr vijay talodhikar	centrifugal governer	https://youtu.be/iGEed-2RdGPw
49	Industrial Management	Mr.Praful Randive	Elements of COST	https://youtu.be/C9wfmreO4lk
50	Industrial Management	Mr.Praful Randive	Principle of Manegement	https://youtu.be/HkVxRnAm3s
51	Industrial Management	Mr.Praful Randive	Just In Time	https://youtu.be/PzIucWELwI
52	Industrial Management	Mr.Praful Randive	Reverse Engineering	https://youtu.be/ZqD_IkDe2mA
53	Industrial Management	Mr.Praful Randive	Concept of Manegement and Holistic Manegement	https://youtu.be/59nd-14RHdU
54	Industrial Management	Mr.Praful Randive	4 p of Marketing Mix	https://youtu.be/IJkO3qD5g4Q
55	Industrial Management	Mr.Praful Randive	Value Engineering	https://youtu.be/O4NF3nli7RA
56	Industrial Management	Mr.Praful Randive	Supply Chain Manegement	https://youtu.be/cejLH7CQ2wo
57	Industrial Management	Mr.Praful Randive	Quality Circle	https://youtu.be/gwW5wLC1hss
58	Industrial Management	Mr.Praful Randive	Objectives of Plant Layout	https://youtu.be/xW_o-nl0C0w
59	Industrial Management	Mr.Praful Randive	Types of Layout	https://youtu.be/Fh7nVpftmCI
60	Computer Integrated Manufacturing	Mrs.Shubhangi Gondane	Introduction of CIMS	https://youtu.be/6q8waSsePEI
61	Computer Integrated Manufacturing	Mrs.Shubhangi Gondane	Components of CIMS	https://youtu.be/4xxX5tGeJdE
62	Computer Integrated Manufacturing	Mrs.Shubhangi Gondane	Introduction of Automation	https://youtu.be/4iaa3KAwhTs
63	Computer Integrated Manufacturing	Mrs.Shubhangi Gondane	CIMS and Automation	https://youtu.be/cv-sIAjXeWE
64	Computer Integrated Manufacturing	Mrs.Shubhangi Gondane	Concurrent Engineering	https://youtu.be/GayvUfUzoNM
65	Computer Integrated Manufacturing	Mrs.Shubhangi Gondane	Difference between SE aand CE	https://youtu.be/OpMtd0jSW0Y
66	Computer Integrated	Mrs.Shubhangi Gondane	Introduction of NC Machine	https://youtu.be/L6F0EbbCmUk

	Manufacturing			
67	Computer Integrated Manufacturing	Mrs.Shubhangi Gondane	Types of NC Machines	https://youtu.be/27ft9zwO-A
68	Computer Integrated Manufacturing	Mrs.Shubhangi Gondane	Proceadure of Manual part programming	https://youtu.be/cXl9xOk10mI
69	Computer Integrated Manufacturing	Mrs.Shubhangi Gondane	Manual part programming on Lathe	https://youtu.be/HDisC7ZMMog
70	Computer Integrated Manufacturing	Mrs.Shubhangi Gondane	Introduction of Group Technology	https://youtu.be/oPRbNUgBK4o
71	Computer Integrated Manufacturing	Mrs.Shubhangi Gondane	Production flow analysis	https://youtu.be/Llp1CdfQJ7U
72	Computer Integrated Manufacturing	Mrs.Shubhangi Gondane	Part classification and coding	https://youtu.be/zn_zAdSwYZ8
73	Computer Integrated Manufacturing	Mrs.Shubhangi Gondane	Machine cell in GT	https://youtu.be/CWEppAIYOMw
74	Advance Manufacturing Technique	Mr.Ashwadeep Fulzele	Conventional & Non-Conventional Machining Process	https://youtu.be/r0TO7vZXVDQ
75	Advance Manufacturing Technique	Mr.Ashwadeep Fulzele	Electro-Discharge Machining	https://youtu.be/14_JFIJ0hY
76	Advance Manufacturing Technique	Mr.Ashwadeep Fulzele	Gas Welding Processes	https://youtu.be/YYViThNxTck
77	Advance Manufacturing Technique	Mr.Ashwadeep Fulzele	Oxy-Acetylene Gas Welding 1	https://youtu.be/Lnb8x0Z07Fc
78	Advance Manufacturing Technique	Mr.Ashwadeep Fulzele	Oxy-Acetylene Gas Welding 2	https://youtu.be/eMPKo6UUZh8
79	Advance Manufacturing Technique	Mr.Ashwadeep Fulzele	Overview of Non Conventional Machining Methods II	https://youtu.be/KTbLbcPnkFA
80	Advance Manufacturing Technique	Mr.Ashwadeep Fulzele	Overview of Non Conventional Machining Methods II	https://youtu.be/a27VH6lTvic
81	Advance Manufacturing Technique	Mr.Ashwadeep Fulzele	Principal parameter of Water Jet Machining	https://youtu.be/Pu5IM3vENgg
82	Advance Manufacturing Technique	Mr.Ashwadeep Fulzele	Working of Water Jet Machining	https://youtu.be/F2D_MMkMdP8
80	Advance Internal Combustion Engine	Mr.Vijay Talodhikar	Splash lubrication system	https://youtu.be/OIQmTAuGAq0
81	Advance Internal Combustion Engine	Mr.Vijay Talodhikar	Clutch plate working	https://youtu.be/0tSFkbBeJx0
82	Advance Internal Combustion Engine	Mr.Vijay Talodhikar	simple carburatar	https://youtu.be/RpnedF0DS1k
83	Advance Internal Combustion	Mr.Vijay Talodhikar	indirect injection system	https://youtu.be/KTbLbcPnkFA

	Engine			
84	Advance Internal Combustion Engine	Mr. Vijay Talodhikar	battery ignition system	https://youtu.be/wNCxyzfq9D8
85	Advance Internal Combustion Engine	Mr. Vijay Talodhikar	injection system in CI	https://youtu.be/DKhdHIZVkl4
86	Automation in Production	V.P.Kshirsagar	Introduction of Automation	https://youtu.be/SMhdfacc79E
87	Automation in Production	V.P.Kshirsagar	Type of Automation	https://youtu.be/DnJrLWiM7bA
88	Automation in Production	V.P.Kshirsagar	Type of Production Process	https://youtu.be/J_eR-lrh-9M
89	Automation in Production	V.P.Kshirsagar	Information Processing Cycle	https://youtu.be/gylYYa0qwSs
90	Automation in Production	V.P.Kshirsagar	Numerical Control Production Systems - Basic concepts	https://youtu.be/-V-w5qMLhs0
91	Automation in Production	V.P.Kshirsagar	Coordinate system and machine motion	https://youtu.be/4vTF7xfRT-Y
92	Automation in Production	V.P.Kshirsagar	Types of NC systems - Point to point, straight cut and continuous path	https://youtu.be/xw1mJZUQhMs
93	Automation in Production	V.P.Kshirsagar	Machine control unit and other components, part programming and tape formats	https://youtu.be/g-7qFoxsj_s
94	Automation in Production	V.P.Kshirsagar	Method of part programming	https://youtu.be/WM2IF0yZl6U
95	Automation in Production	V.P.Kshirsagar	Introduction of manual part programming (NC word)	https://youtu.be/-xFWfSmTYS0
96	Automation in Production	V.P.Kshirsagar	Basic of APT part Programing	https://youtu.be/DnJrLWiM7bA
97	Automation in Production	V.P.Kshirsagar	Practical on CNC milling Machine	https://youtu.be/J_eR-lrh-9M
98	Automation in Production	V.P.Kshirsagar	Simple Milling Program on APT	https://youtu.be/gylYYa0qwSs
99	Automation in Production	V.P.Kshirsagar	Practical on CNC Lathe Machine Part 1	https://www.youtube.com/watch?v=BQ2Xja89gBY&t=104s
100	Automation in Production	V.P.Kshirsagar	Practical on CNC Lathe Machine Part 2	https://www.youtube.com/watch?v=Faw93ILiLHE

HoD ,ME