



Subject wise YouTube Links of Online Classes during the AY: 2020-21

Department: Mechanical Engineering

Subject: Fluid Mechanics

Subject Code: 18ME43

Faculty: Dr.S.N.Topannavar

Module-1	Fluid Properties: https://www.youtube.com/playlist?list=PLNpOOAnGTde_xzkDF9U6-ITwVckBGEYpX
	Concept of Continuum and Knudsen Number: https://www.youtube.com/playlist?list=PLNpOOAnGTde9PesddJ1JNECzL1Z4Kq0fY
	Fluid Pressure-Types, Pascal and Hydrostatic Laws: https://www.youtube.com/playlist?list=PLNpOOAnGTde_WGGsZZJs5oy9HcxP518Kg
	Fluid Pressure-Measuring Equipments (Mechanical and Manometers): https://www.youtube.com/playlist?list=PLNpOOAnGTde_FYGqmM6ScEYfOMMKS9vzq
	Fluid Statics: https://www.youtube.com/playlist?list=PLNpOOAnGTde91ZNGzRJRH7LLgY91vsGpT
Module-2	Buoyancy: Meta Center, Estimation of Meta-centric Height and Stability Criteria for Submerged and Floating Body: https://www.youtube.com/playlist?list=PLNpOOAnGTde8JyujvDxSYiWlaoLzH6ftM
	Fluid Kinematics-Velocity, Acceleration, Types of Fluid Flows and Rotational & Irrotational Flows:



	<p>https://www.youtube.com/playlist?list=PLNpOOAnGTde_B47-She8DoHAJc2LAgdl6</p> <p>Fluid Kinematics-One and Three Dimensional Continuity Equations: https://www.youtube.com/playlist?list=PLNpOOAnGTde9AUbtOy9hUX8asTmFIGIs-</p> <p>Fluid Kinematics-Stream and Velocity Potential Functions, Steam, Streak & Path Lines: https://www.youtube.com/playlist?list=PLNpOOAnGTde-7YvMJWXQT7u7GQmNyrLNI</p>
Module-3	<p>Bernoulli's Equation (Real & Ideal Fluids) & Reynolds Experiment with Characterization of Flow: https://www.youtube.com/playlist?list=PLNpOOAnGTde_sHOyu7oYHMfOpuHK0rJBt</p> <p>Applications of Bernoulli's Equation and Navier-Stoke's Equation: https://www.youtube.com/playlist?list=PLNpOOAnGTde_zo49glC9-Of5k7asiIBrC</p> <p>Flow through Pipe (Hagen Poiseuille Equation): https://www.youtube.com/playlist?list=PLNpOOAnGTde89XTDnewAFI6LL6knI9K1k</p> <p>Losses in Pipe Flow: Major Loss (Darcy Weisbach Equation) & Minor Losses: https://www.youtube.com/playlist?list=PLNpOOAnGTde9y9BzhhbW0hashuRIFEScN</p>
	<p>Flow Over Bodies (Boundary Layer Development, Aerodynamic & Bluff Bodies, Flow Separation and It's Control, Lift and Drag Forces Calculation): https://www.youtube.com/playlist?list=PLNpOOAnGTde81CN6QkFBIPYciMOG-CRZ7</p>



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	Dimensional Analysis and Model Analysis (Rayleigh Method & Buckingham's Pi Theorem): https://www.youtube.com/playlist?list=PLNpOOAnGTde_T6jmnkB5Dc_w8IINTuTYa
Module-5	Compressible Flow and CFD: https://www.youtube.com/playlist?list=PLNpOOAnGTde8c1Y1zJO8kg9lrSE_rvcKT



Subject: Elements of Mechanical Engineering

Subject Code: 18ME15/25

Faculty: Dr. S.N.Topannavar

Class: II Semester

Module-1	Basics of Thermodynamics-Thermodynamic Heat & Work, Laws of Thermodynamics and Entropy: https://www.youtube.com/playlist?list=PLNpOOAnGTde_YN-LOI7hQbyOzMCn-8Rs3
	Steam Formation-Properties and Steam Table: https://www.youtube.com/playlist?list=PLNpOOAnGTde9Gc0WkjO2O8J8_rvnertjA
Module-2	Boilers: https://www.youtube.com/playlist?list=PLNpOOAnGTde-Ab7w5oaxAD0PU-ICWpliP
	Turbines (Hydraulic): https://www.youtube.com/playlist?list=PLNpOOAnGTde8-8auVrTL-47f96MMGUCGx
	Hydraulic Pumps: https://www.youtube.com/playlist?list=PLNpOOAnGTde-zsnTYU7zL2WAYqjjOt0dD
Module-3	Internal Combustion Engines (IC Engines): https://www.youtube.com/playlist?list=PLNpOOAnGTde9oNXT_GoZ3s2Appq6bOLtO
	Refrigeration and Air Conditioning (AC): https://www.youtube.com/playlist?list=PLNpOOAnGTde-DEauNdHke4t2dfmmyo_FZ
Module-4	Properties, Compositions and Industrial Applications of Engineering Materials:



	<p>https://www.youtube.com/playlist?list=PLNpOOAnGTde-X0aFOZO3leFyoMV_cBAcc</p>
	<p>Joining Processes (Soldering, Brazing & Welding): https://www.youtube.com/playlist?list=PLNpOOAnGTde9ExopzIrBppMk_3W5WtuHa</p>
	<p>Belt and Gear Drives: https://www.youtube.com/playlist?list=PLNpOOAnGTde91homkiw-TD9gJkIcpYm6b</p>
Module-5	<p>Lathe Machine: https://www.youtube.com/playlist?list=PLNpOOAnGTde91EEGw7IZfWCjc_VOB6Npw</p>
	<p>Milling Machine: https://www.youtube.com/playlist?list=PLNpOOAnGTde-uN2wX9dvWEmJZFS11CmOS</p>
	<p>Introduction to Advanced Manufacturing Systems and Robots: https://www.youtube.com/playlist?list=PLNpOOAnGTde-4Qcyl09FnnawndoFv-1os</p>



Course Coordinator: Prof.M. A. Hipparagi
Course: Metal Cutting and Forming

Class: IV Sem
Course Code:18ME45A

Module/ Topic No.	Details of Syllabus covered	No. of Hrs. mentioned in syllabus	% of syllabus Covered	e-content/Video/PPT link
I	Introduction to metal cutting	08	20	Class room teaching
II	Milling, Drilling, Shaping and Grinding machine	08	20	https://youtu.be/msr9X0_KGzg https://youtu.be/5j9RBp8zHZI https://youtu.be/FUYkmfenG4k https://youtu.be/I9HTsFXw-Cs https://youtu.be/NBmsR8Hy48o https://youtu.be/qbkuiO6mQhk
III	Tool wear Tool life	08	20	https://youtu.be/ne1HjvDH9HI https://youtu.be/-6iNJSIWR_A
IV	Mechanical working of metals	08	20	https://youtu.be/YGnmSvXaEVo https://youtu.be/oSh4SqpSdpA https://youtu.be/wUzsEZut9G8 https://youtu.be/759zO6GCOUM
V	Sheet metal operations	08	20	https://youtu.be/haMWMrtjdJ8 https://youtu.be/5B5CmxR4PjQ https://youtu.be/RrWVch3r0nc
	Total	40	100	



Course Coordinator: M A Hipparagi
Course: Computer Integrated Manufacturing

Class: VI Sem
Course Code: 17ME62

Module/ Topic No.	Details of Syllabus covered	No. of Hrs. mentioned in syllabus	% of syllabus Covered	e-content/Video/PPT link
I	Introduction to CIM and Automation	10	20	Class room teaching
II	CAD and Computer Graphics Software CAPP	10	20	https://youtu.be/6UQNNGtSQ2E https://youtu.be/rLKEQKJ1r28 Class room teaching
III	Flexible Manufacturing System Line Balance	10	20	https://youtu.be/cdsp1KyFjpc Class room teaching
IV	Computer Numerical Control Robot Technology	10	20	https://youtu.be/LAriLY9sMSU https://youtu.be/zImGT1njkRY https://youtu.be/p1nrRSB0s3w https://youtu.be/IGBSTUg0SXE https://youtu.be/oqisf5qccBw
V	Additive Manufacturing System Future of Automated Factory	10	20	https://youtu.be/ufn62YTzdvQ https://youtu.be/uVqcmvtraeY https://youtu.be/XoIOxlfalsA https://youtu.be/BLMN5t2pG2U
	Total	50	100	



Course Coordinator: Prof. M S Futane

Class: VI Sem

Sub: Computer Integrated Manufacturing

Course Code: 17ME62

SN	Module No.	Name of the Module	Youtube links	Revised Youtube links
	2	CAD & computer Graphics	https://youtu.be/DqmxHspZEAs https://youtu.be/hQIP3cMysic	https://youtu.be/gr6CauRijF8 https://youtu.be/BTKvKBAYsII
	3	Flexible Manufacturing System & Line balancing	https://youtu.be/DN8ltq2ZzSo https://youtu.be/XvbyK0xn7Hs https://youtu.be/P6SsmXGgV7I	https://youtu.be/aLxDLgdSuNM https://youtu.be/gcw_Y8JJDIO https://youtu.be/SnCUFKe22Eg
	4	Computer Numerical Control & robotics	https://youtu.be/p9dUtTnMpkg https://youtu.be/7knuGLlaOHI https://youtu.be/IDMNXMt43VQ	https://youtu.be/RclSjBJ9MvA https://youtu.be/vSmMLypno54
	5	Additive Manufacturing & Future of Industry	https://youtu.be/kgyHrC8eEE8 https://youtu.be/9xZlkwTSdFk https://youtu.be/0w6f36SXXts https://youtu.be/KxTdGwE_AU4 https://youtu.be/Ba59bEvIKo4	https://youtu.be/u2rUwCtliW4 https://youtu.be/xpAehq6QgJg



Course Coordinator: Prof. M S Futane

Class: VI Sem

Sub: Product Life cycle management

Course Code: 15ME835

S N	Module No.	Name of the Module	Youtube links	Revised Youtube links
1	3	Product development	https://youtu.be/MGrJO-M33cY https://youtu.be/urZNRa5QDnU https://youtu.be/mMXbAG0Lrk https://youtu.be/SaUqtODEVhk	https://youtu.be/ZZM1JOjeAQ4 https://youtu.be/Kvi1R3s0WzI https://youtu.be/7dpQ6onfIXs https://youtu.be/uy0K1bKgk-Y
2	4	Technology Forecasting	https://youtu.be/sVvUOBButuw https://youtu.be/a3pVx40eHBI https://youtu.be/gj3PJVpMm2s	https://youtu.be/o-CUwrEU0tA https://youtu.be/rVbjWN3q1So https://youtu.be/6en_35pNCMo
3	5	Product Building & structure	https://youtu.be/RFdXQoLsK6A https://youtu.be/snNg_cTtCHA https://youtu.be/Kk13c9nX504	https://youtu.be/o-CUwrEU0tA https://youtu.be/rVbjWN3q1So https://youtu.be/6en_35pNCMo



Course Coordinator: Prof. S.A.Goudadi

Class: VIII Sem

Sub: Operations Research

Course Code: 15ME81

Module	Name of Module	You tube link
III	Transportation Problem	https://www.youtube.com/watch?v=HhB6wTna9qs
		https://www.youtube.com/watch?v=gWUWmKnnSIY
		https://www.youtube.com/watch?v=Qbusinf9hw4
		https://www.youtube.com/watch?v=I66O7DovJNs
IV	Network analysis	https://www.youtube.com/watch?v=6BttRaiy4jU
		https://www.youtube.com/watch?v=tnEQJMDLqwc
		https://www.youtube.com/watch?v=pMfkehm5YMI
		https://www.youtube.com/watch?v=ojEQbZfoYLE
V	Game Theory	https://www.youtube.com/watch?v=Y1tIHmrM2sA
		https://www.youtube.com/watch?v=20j62V37keA
		https://www.youtube.com/watch?v=jQE3i10EQLc
		https://www.youtube.com/watch?v=F5YPlprYhqs
		https://www.youtube.com/watch?v=8PitbLsoxh8



Course Coordinator: Prof. S.A.Goudadi

Class: VI Sem

Sub: Finite Element Analysis

Course Code:17ME61

Module	Name of Module	You tube link
II	One-Dimensional Elements- Analysis of Bars and Trusses	https://www.youtube.com/watch?v=qFKjOUawnQY
		https://www.youtube.com/watch?v=A5Vbz0UyVM4
III	Beams and Torsion of Shafts	https://www.youtube.com/watch?v=09YzedVymGA
		https://www.youtube.com/watch?v=nyA1fGY2qLU
IV	Heat Transfer	https://www.youtube.com/watch?v=tsDwPsDG6WE
		https://www.youtube.com/watch?v=pg5xESWSzKs
V	Axisymmetric Elements and Dynamic Considerations	https://www.youtube.com/watch?v=OVmgejza27M
		https://www.youtube.com/watch?v=hJMU-8CpRwk



Course Coordinator: Prof. Mahantesh Tanodi

Class: IV Sem

Sub: Kinematics of Machines

Course Code:18ME44

Module	Name of the Module	You tube link
II	Velocity and Acceleration Analysis of Mechanisms (Graphical Method) & And Analysis by Instantaneous Center Method	https://youtu.be/SuAe6gWutQY https://youtu.be/qaJ7_xwXZwE https://youtu.be/rXBLAyM4guI https://youtu.be/I5jsvUUWdxY https://youtu.be/dU8YREOW83E
III	Velocity and Acceleration Analysis of Mechanisms (Analytical Method), & Freudenstein's equation,& Function Generation	https://youtu.be/lk20PCAZb_E https://youtu.be/dITT-x-TS88 https://youtu.be/7wX77wfWADQ https://youtu.be/vt-wjzyG64Y https://youtu.be/jHbz0vzxILs
IV	Cams	https://youtu.be/YEKAAeh566Q https://youtu.be/kvKk_ORQTn8 https://youtu.be/OR-aKIVBW9M https://youtu.be/12ww2j_fv0A https://youtu.be/6OxDKXI5qfo https://youtu.be/g-68dJ2sPWE https://youtu.be/Y2u6F01Wk7U https://youtu.be/IryKGVQJ2CE https://youtu.be/TW-iDpbahA
V	Spur Gears & Gear Trains	https://youtu.be/HOVJsdlrLrqo https://youtu.be/eEmxvNjL8bI https://youtu.be/AWf-9-EKsMc



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<https://youtu.be/DOZXt-VT0es>
<https://youtu.be/md8h1oQVjr0>
<https://youtu.be/f4h8n9ffzYU>
<https://youtu.be/p3BWY2X5oHQ>
<https://youtu.be/kTILer9xii8>
<https://youtu.be/-DN-bf8ytG0>
<https://youtu.be/xN1zHtx7mZE>
https://youtu.be/70kt_euUDmw
<https://youtu.be/7JaFzMUMWzk>
<https://youtu.be/ZbdjiNnWt64>
https://youtu.be/CvTYIR_8RuE
<https://youtu.be/kI-B0vqqijE>
<https://youtu.be/F8jwnkfwFP4>
<https://youtu.be/oK1Wrz4JHJU>
<https://youtu.be/GR2rvkvkeho>



Course Coordinator: Prof. M.M.Shivasimpi

Class: IV Sem

Sub: Applied Thermodynamics

Course Code:18ME42

Module	Name of Module	You tube link
I	Air standard cycles and IC engines	https://youtu.be/Kb6T6sVJqPQ https://youtu.be/V5q06HOnO-8 https://youtu.be/4U8EJQ1Odyw https://youtu.be/beTFj0I6Tlo https://youtu.be/DjbhBMaairQ https://youtu.be/RaLbvH551E4 https://youtu.be/2cFWRy2iEb4 https://youtu.be/YKla6tCiZec https://youtu.be/7xrHheXmqAg https://youtu.be/dDal_EA3Rqo https://youtu.be/d27k17wSxTM
II	Gas Power Cycles	https://youtu.be/Hlt5_Ln424Y https://youtu.be/fS0wyYE6PRk https://youtu.be/MPb6QqKKl8o https://youtu.be/wnR-04FsVrU https://youtu.be/6S1gHsBPIWc https://youtu.be/r2xfl0DFKR8 https://youtu.be/t3InfeDR9gw https://youtu.be/8Dqmm3v6Jfo https://youtu.be/Rv4qZEhqqL8



III	Vapor Power Cycles	https://youtu.be/R_WKhC6JVx4 https://youtu.be/XTr1afi9AtY https://youtu.be/h2t8ultgIGs https://youtu.be/QI1WP97xxOk https://youtu.be/Vx-AaiZI-Cc https://youtu.be/JeQLBXAi40M https://youtu.be/mlhP72RQ_yM https://youtu.be/V24USQ_GKZA https://youtu.be/waU1MozQ3Yc https://youtu.be/LB7qkDS1xxo https://youtu.be/x7CPjq0Kzhc https://youtu.be/T9DZz8RifDM
IV	Refrigeration Cycles and Psychrometrics and Air-Conditioning Systems	https://youtu.be/YnzoZ3-SFII https://youtu.be/xzBr0tUQsT8 https://youtu.be/MmVGiYxKldc https://youtu.be/70xKozo_UTY https://youtu.be/NB0NOeuoxes https://youtu.be/mVP7_J-abP0 https://youtu.be/9hrLrXTWY9c https://youtu.be/HrdqABvwIXA https://youtu.be/Whcv5it1r2o https://youtu.be/QV2lqsZnzk4 https://youtu.be/Zo1HPX_L4b0 https://youtu.be/F5HZA0TqdNE https://youtu.be/zg2jK8IXPWI



V	Reciprocating Compressors and Steam nozzles	https://youtu.be/JOHIEIKW-XY https://youtu.be/OsuAhBDRIMc https://youtu.be/ID0tP_G2IFc https://youtu.be/5Mz79tFd7oc https://youtu.be/_BrPnfY3Z_k https://youtu.be/JxX4_4T6JmE https://youtu.be/Nf2ifNrQp7Q https://youtu.be/CDNnhG1nb9c https://youtu.be/djPdWgaluSA https://youtu.be/LgT71iyDI9s https://youtu.be/-AISCI-zOf0 https://youtu.be/QgvYf5_RAxg
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Faculty: D N Inamdar

Sem	Sub Code	Subject	Youtube Links
VI	18ME62	Design of Machine Elements-2	https://youtu.be/iACnD-XqL88
			https://youtu.be/mF2ifFJrjJ4
			https://youtu.be/rpDHuO3Pxws
			https://youtu.be/ybZkNX6eiRg
			https://youtu.be/nsQIcF3F6kw
			https://youtu.be/qWj6D1qLnRg
			https://youtu.be/fPnmF6GfJcg
			https://youtu.be/72SAf0m0YM0
			https://youtu.be/oY47HPVGJ4I
			https://youtu.be/yHxQj9IWvq8
			https://youtu.be/GfLF4Z_Aq_o
			https://youtu.be/az2Smx4r1VQ
			https://youtu.be/bO5-QcZewAY
			https://youtu.be/PTZmnBrCSiE
			https://youtu.be/Rm5ObsJUrqE
			https://youtu.be/bZ6ySPGyw4A
			https://youtu.be/-6Vv7JY2UXc
			https://youtu.be/q-TaV0sRPkY
			https://youtu.be/6mwwHRfnVqE



			https://youtu.be/NYQtRsiF4W4
			https://youtu.be/VsK_KvdsPac
			https://youtu.be/bpBtdjVxfc
			https://youtu.be/f3P5QeFkwPU
			https://youtu.be/VsK_KvdsPac
			https://youtu.be/2r9Qi2eDMRk
			https://youtu.be/veFcjcbDVwM
II	18EGD15/25	Engineering Graphics	https://youtu.be/uNfrNGNrt4Y
			https://youtu.be/hFoI3Kbr-as
			https://youtu.be/m8MfTWS091Q
			https://youtu.be/wIhimF-dEdE
			https://youtu.be/t7feE3TNSuY
			https://youtu.be/aKCYsDdO5eA
			https://youtu.be/2eP8nbvw-Xw
			https://youtu.be/L4f4Sn2U0vg
			https://youtu.be/Oi7O9Jjvd_Y
			https://youtu.be/YctOQeYNUuY
			https://youtu.be/gAVZLdZexQg
			https://youtu.be/_Z3x2wLGSR4
			https://youtu.be/zvn7d_TqLtU
			https://youtu.be/1wem835M2Kw



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<https://youtu.be/42w14u4AV1c>