DON BOSCO INSTITUTE OF TECHONOLGY, KURLA, MUMBAI

		SCO INSTITUTE OF TECHONOLGY, KURLA, MUMBAI		
	Depa	rtment of Mechanical , (Odd semester, 2016-17) SE Mech		
Course Name:	Applied Mathematics III			
Course Code	MEC301			
Faculty Name: Year	Pranjalee Kurundkar 2 Sem 3			
CO Number	2 Jen 3	Course Outcome		
	Students will be able to			
	(i) Obtain Laplace Transforms for a g (ii) Obtain Inverse Laplace Transform			
1500004.4	(iii) Define Karl Pearson's correlation	coefficient and Spearman's rank correlation coefficient		
MEC301.1	(iv) Define harmonic functions and O	rthogonal trajectories		
	Students will be able to (i) Obtain the Laplace Transforms. In	verse Laplace Transforms of combinations of standard functions using the properties of Laplace and		
	Inverse Transforms.			
	(ii) Obtain Karl Pearson's correlation (iii) Obtain the equations of two lines	coefficient and Spearman's rank correlation coefficient s of regression		
	(iv) Fit the curve by the method of le(v) Understand the properties of orth			
	(vi) Obtain Fourier series, half-range	Fourier series and Fourier sine and cosine series of periodic functions.		
	(vii) Obtain complex form fourier ser (viii) Find Cauchy – Riemann equation			
		nd orthogonal trajectory of given family. btain the image under given standard transformation		
	(xi) Define and obtain bilinear transfe	ormation and its fixed points.		
		i) Evaluate the line integral of a function of complex variable. ii) Obtain Taylor's and Laurent's series expansion		
MEC301.2	(xiv) Define singularities of complex	valued functions.		
	Students will be able to (i) Apply Laplace and Inverse Laplace	transform concepts to evaluate integrals		
	(ii) Solve initial and boundary value	problems using Laplace transform.		
MEC301.3		es to find solution of Wave,Heat and Laplace equations e solution of partial differential equations.		
	Students will be able to			
MEC301.4	(i) Understand and analyze the comp (ii) Evaluate integrals using Cauchy's	lex valued functions. integral theorem,Cauchy's integral formula and Residue theorem.		
Course Name:	Thermodynamics			
Course Code Faculty Name:	MEC302 Jenifer Abin / Anil Sabat			
Year	2 Sem 3			
CO Number		Course Outcome		
MEC302.1		rnamics related to quality and quantity of energy, heat and work, enthalpy and entropy.		
MEC302.2 MEC302.3		ne application of the laws of thermodynamics to various real life systems. culate parameters like work transfer and efficiency.		
WEC302.3	interpret trie basic power cycles and calc	unate parameters like work transfer and eniciency.		
Course Name:	Strength of Materials			
Course Code	MEC303			
Faculty Name:	Swapnil G/ Mandar Damble 2 Sem 3			
Year CO Number	2 Sem 3	Course Outcome		
MEC303.1	State concepts of various types of str.	esses induced in given member under given loading conditions.		
	Describe the concept of shear force d	iagram, bending moment diagram, deflection in beams and stress distribution in a member under different		
MEC303.2 MEC303.3	loading conditions including shafts su Compute strain energy in mechanical			
MEC303.4	Calculate critical load for columns su			
Course Name: Course Code	Production Process I MEC304			
Faculty Name:	Dipika Gupta / Sudhkar Ambhore			
Year	2 Sem 3			
CO Number	Caudona will be able to identify and d	Course Outcome		
MEC304.1	welding.	escribe the basic concept of different primary forming processes like Metal casting, forging, Rolling and		
MEC204.2	Student will be able to Distinguish be processes.	tween conventional and modern machine tools and select best machine tool for respective machining		
MEC304.2 MEC304.3	1	concept of producing polymer components and ceramic components.		
MEC304.4		Student will be able to solve numerical on riser design, rolling and welding.		
Course Name:	Computer Aided Machine Drawing			
Course Code Faculty Name:	MEL305 Hemant H / Johnson V	-		
Year	2 Sem 3			
CO Number		Course Outcome		
MPLOOF		presentation of different section lines w.r.t.materials. and threaded designation and to prepare 2D		
MEL305.1	drawing, Nuts, Bolts, Keys, Cotter scr Illustrate curves of intersection for di	ew,springs etc. fferent solids which penetrate each other w.r.t. their axis and Illustrate true shape and size of inclined		
MEL305.2	surface on the Auxiliary plane.			
MEL305.3	Preparation of detail drawing and ass	sembly drawing of joints, shaft couplings, Bearings, Pulleys and pipe joints, Valves and IC Engine parts, dimensional tolerances indicating various types of fits.		
	Inspection of actual dimensions from	a physical model (e.g. cotter joint and other machine element) and preparing 2D and 3D models from		
MEL305.4	those dimensions.			
MEL305.5	Construct 3D model assembly in Soli	d Works platform and decide the tolerance values for the mating parts.		
Course Name:	Database and information retrieval sv			
Course Name: Course Code	Database and information retrieval sy MEL306			
Course Code Faculty Name:	MEL306 Sana Sheikh			
Course Code Faculty Name: Year	MEL306			
Course Code Faculty Name: Year CO Number	MEL306 Sana Sheikh 2 Sem 3	Course Outcome		
Course Code Faculty Name: Year	MEL306 Sana Sheikh 2 Sem 3	Course Outcome ics of DBMS, RDBMS and design the data model and logical schema of databases including the E-R me		
Course Code Faculty Name: Year CO Number MEL306.1 MEL306.2 MEL306.3	MEL306 Sana Sheikh 2 Sem 3 Ability to define and explain the bas To apply SQL the standard language for	Course Outcome ics of DBMS, RDBMS and design the data model and logical schema of databases including the E-R mer basic and nested queries. es and analyze it during design of the database.		
Course Code Faculty Name: Year CO Number MEL306.1 MEL306.2 MEL306.3 MEL306.4	MEL306 Sana Sheikh 2 Sem 3 Ability to define and explain the bas To apply SQL the standard language for To understand the functional dependenci	Course Outcome ics of DBMS, RDBMS and design the data model and logical schema of databases including the E-R me basic and nested queries. se and analyze it during design of the database. dt retrieve the data from database.		
Course Code Faculty Name: Year CO Number MEL306.1 MEL306.2 MEL306.3	MEL306 Sana Sheikh 2 Sem 3 Ability to define and explain the bas To apply SQL the standard language for To understand the functional dependenci	Course Outcome ics of DBMS, RDBMS and design the data model and logical schema of databases including the E-R mer basic and nested queries. es and analyze it during design of the database.		

Course Name: C Engines MECSO1 MEC
Paciety Name: Sandeep Sabalist / Pawan K Year 3 Sem 5 Course Outcome
Same
MCCS01.2 Differentiate constructional features and operations of 4 stroke 8.2 stroke S.I. & C.I. engines.
MECS01.1 Differentiate constructional features and operations of 2 storke & 2 storke & 1.8 c.l. engines. Identify and explain construction and working of various subsystems and accessories of I C Engines such as fuel injection system, ignition system, instruction etc. MICS01.2 Plor and analyze performance of engines using engine retaining and evaluation methods MICS01.5 Describes the recent developments in the I C engines on environment and air pollution and knows the workfordwire regulatory approach of courtolling this. MICS01.5 Describes the recent developments in the I C engines field in terms of new technologies for fuel efficiency, alternate fuels and emission control Course Name: MICS01.5 Describes the recent developments in the I C engines field in terms of new technologies for fuel efficiency, alternate fuels and emission control Course Name: MICS01.2 Mechanical Measurements and Control Course Name: MICS02.1 Eshabit memory of previously learned material by recalling facts, terms, basic concepts, and answers for selecting specific measuring instruments and its control systems, depicting a suitable example. MICS02.1 Eshabit memory of previously learned material by recalling facts, terms, basic concepts, and answers for selecting specific measuring instruments and its control systems, depicting a suitable example. MICS02.1 Eshabit memory of previously learned material by recalling facts, terming, comparing, translating, interpreting, giving descriptions, and stating main index-principles for measurement of mass and fluid motion; correlating them by forming a mathematical model and obtaining a Transfer function for a given system. MICS02.1 Eshabit memory of previous in measuring instruments and Transfer function for a given system. MICS02.5 Eshabit memory of problems in measuring instruments and Transfer function for a given system. MICS02.5 Eshabit memory of problems in measuring instruments and transfer function for a given system. MICS03.2 Description and transfer function in process III
MECS01.1 Differentiate constructional features and operations of 4 stroke & 2 stroke & 2 stroke S.I. & C.I. engines. Identify and explain construction and working of various subsystems and accessories of I C Engines such as full eligicities opstem, ignition exc. MicS01.3 MicS01.4 MicS
MECS01.2 MECS01.3 MECS01.4 MECS01.4 MECS01.5 Describes the recent developments in the I C engines ensuring and evaluation methods Understand and explain lampset of I C Engines on environment and air pollution and knows the worldwide regulatory approach of controlling this. MECS01.5 Describes the recent developments in the I C engines on environment and air pollution and knows the worldwide regulatory approach of controlling this. MECS01.5 Describes the recent developments in the I C engines field in terms of new technologies for fuel efficiency, alternate fuels and emission control Course Name: Cour
MECS01.2 such as fuel injection system, justician system, lubrication etc. MECS01.4 by Plot and analyze performance of engines using engine testing and evaluation methods MECS01.5 bescribes the recent developments in the 1 C engines field in terms of new technologies for fuel efficiency, alternate fuels and emission control Course Name: Course Code MECS02.1 MECS02.1 bescribes the recent developments in the 1 C engines field in terms of new technologies for fuel efficiency, alternate fuels and emission control Course Name: Course Code MECS02.1 MECS02.1 bescribes the recent developments in the 1 C engines field in terms of new technologies for fuel efficiency, alternate fuels and emission control Course Name: CO Number MECS02.1 bescribes the recent developments in the 1 C engines field in terms of new technologies for fuel efficiency, alternate fuels and emission control Course Odd MECS02.1 bescribes the recent developments in the 1 C engines field in terms of new technologies for fuel efficiency, alternate fuels and emission control Course Odd MECS02.2 bescribes the recent developments and Control Course Odd MECS02.1 behavior of the control
MECS01.3 Plot and analyze performance of engines using engine testing and evaluation methods Understand and explain Impact of I C engines on environment and air pollution and knows the worldwide regulatory approach of controlling this. MECS01.5 Describes the recent developments in the I C engines field in terms of new technologies for fuel efficiency, alternate fuels and emission control
MECSO1.5 Describes the recent developments in the I C engines field in terms of new technologies for fuel efficiency, alternate fuels and emission control Course Name: Course Code MECSO2 Faculty Name: MECSO2.1 MECSO2.1 MECSO2.1 MECSO2.2 MECSO2.1 MECSO2.2 MECSO2.3 MECSO2.3 MECSO2.3 MECSO2.5 MECSO2.4 MECSO2.4 MECSO2.4 MECSO2.4 MECSO2.4 MECSO2.4 MECSO2.4 MECSO2.4 MECSO2.5 MECSO2.5 MECSO2.5 MECSO2.5 MECSO2.5 MECSO2.6 MECSO2.6 MECSO2.6 MECSO3 MECSO2.7 MECSO2.7 MECSO2.8 MECSO2.8 MECSO2.8 MECSO3.9 MECSO3.9 MECSO3.9 MECSO3.1 MECSO3.1 MECSO3.1 MECSO3.1 MECSO3.1 MECSO3.2 MECSO3.3 MECSO3.4 MECSO3.4 MECSO3.4 MECSO3.6 MECSO3.6 MECSO3.6 MECSO3.6 MECSO3.1 MECSO3.7 MECSO3.7 MECSO3.8 MECSO3.8 Present and defend opinison on error analysis by making judgments about information, validity related to measuring instruments operating at mechanical, electrical and electronic control level. Make inferences and find evidence to support generalizations for stabilizing of a given system. MECSO3.1 MECSO3.1 MECSO3.1 Denonstrate understanding of sheet metal forming and various stress systems involved in metal forming operations. MECSO3.1 Denonstrate understanding of sheet metal forming and various stress systems involved in metal forming operations. MECSO3.1 Denonstrate understanding of sheet metal forming and various stress systems involved in metal forming operations. MECSO3.1 Denonstrate understanding of sheet metal forming and various stress systems involved in metal forming operations. MECSO3.1 Denonstrate understanding of sheet metal forming and various stress systems involved in metal forming operations. MECSO3.1 Denonstrate understanding of sheet metal forming and various stress systems involved in metal forming operations. MECSO3.1 Denonstrate understanding of sheet metal forming and various stress systems involved in metal forming operations. MECSO3.1 Denonstrate understanding of churches, Brakes and Dynamometers, Gear Trains and Gyroscope. MECSO4.1 MECS
MECSO1.5 Describes the recent developments in the I C engines field in terms of new technologies for fuel efficiency, alternate fuels and emission control Course Name: Course Code MECSO2 Faculty Name: MECSO2.1 MECSO2.1 MECSO2.1 MECSO2.2 MECSO2.1 MECSO2.2 MECSO2.2 MECSO2.3 MECSO2.3 MECSO2.3 MECSO2.3 MECSO2.4 MECSO2.4 MECSO2.4 MECSO2.4 MECSO2.4 MECSO2.4 MECSO2.4 MECSO2.5 MECSO2.5 MECSO2.5 MECSO2.5 MECSO2.5 MECSO2.6 MECSO2.6 MECSO3 MECSO2.7 MECSO2.7 MECSO2.8 MECSO2.8 MECSO3 Design jigs and fistures for a given applications. MECSO3 MECSO3 MECSO3 MECSO3 MECSO3 MECSO3 MECSO3 MECSO3 MECSO3 Design jigs and fistures for a given applications. MECSO3 MECSO3 Demonstrate understanding of sheet metal forming and various stress systems involved in metal forming operations. MECSO3 ME
Mechanical Measurements and Control
Mechanical Measurements and Control
Course Code MECSO2
Production Process-III
B S Chavan / Mahesh R Year 3 Sem 5 Course Outcome
CONumber Subhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers for selecting specific measuring instruments and its control systems, depicting a suitable example. Demonstrate understanding of 1 facts and teash by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas/Principles for measurement of mass and fluid motion; correlating them by forming a mathematical model and obtaining a Transfer function for a given system. MECS02.2
Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers for selecting specific measuring instruments and its control systems, depicting a suitable example. Demonstrate understanding of facts and Ideas by organizing, companing, translating, interpreting, giving descriptions, and stating main indeasy/Principles for measurement of mass and fluid motion; correlating them by forming a mathematical model and obtaining a Transfer function for a given system. Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way to attain iterative capabilities and tackle variety of problems in measuring instruments and Transfer function for a given system. Examine and break information into parts/ structure by identifying process of measuring instruments operating at mechanical, electrical and electronic cornor level. Make inferences and find evidence to support generalizations for stabilizing of a given system by varying different variables like damping ratio, gain, poles, zeros, frequency etc for a given system under study. Present and defend opinions on error analysis by making judgments about information, validity related to measuring instruments integrating mathematical tools like the PID, root locus, bode plot, frequency response for determination of stability of a system Course Name:
Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers for selecting specific measuring instruments and its control systems, depicting a suitable example.
instruments and its control systems, depicting a suitable example. Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas/Principles for measurement of mass and fluid motion; correlating them by forming a mathematical model and obtaining a Transfer function for a given system. MEC502.3 Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way to attain iterative capabilities and tackle variety of problems in measuring instruments and Transfer function for a given system and tackle variety of problems in measuring instruments and Transfer function for a given system delectronic control level. Make inferences and find evidence to support generalizations for stabilizing of a given system by varying different variables like damping ratio, gain, poles, zeros, frequency etc for a given system under study. Present and defend opinions on error analysis by making judgments about information, validity related to measuring instruments integrating mathematical tools like the PID, root locus, bode plot, frequency response for determination of stability of a system Course Code MEC503.1 Demonstrate understanding of sheet metal forming and various stress systems involved in metal forming operations. MEC503.3 Get knowledge about non-conventional machining operations and its application areas. MEC503.3 Get knowledge about non-conventional machining operations and its application areas. Illustrate advanced concepts such as rapid prototyping and Agile manufacturing. Course Name: Theory of Machines-II Course Code MEC504.1 Descriptions of Mechines-II Course Code MEC504.2 Derive the expressions for torque in clutches, Brakes and Dynamometers, Governors, Gear Trains and Gyroscope. MEC504.4 MEC504.4 Descriptions of the problems of the problems of the problems of the problems of the problems. MEC504.4 Analyse dynamic forces for Engine and Plywheel.
ideas/Principles for measurement of mass and fluid motion; correlating them by forming a mathematical model and obtaining a Transfer function for a given system. MEC502.3 MEC502.4 MEC502.4 MEC502.4 MEC502.5 MEC502.5 MEC502.5 MEC502.5 MEC503.1 Course Code MEC503.1 Demonstrate understanding of sheet metal forming and various stress systems involved in metal forming operations. MEC503.3 MEC503.3 MEC503.3 MEC503.3 MEC503.3 MEC503.4 MEC503.1 Demonstrate understanding of sheet metal forming and various stress systems involved in metal forming operations. MEC503.3 MEC503.1 MEC503.1 MEC503.3 MEC503.3 MEC503.3 MEC503.4 MEC503.1 MEC503.1 Design jigs and fixtures for a given applications. MEC503.1 MEC503.1 MEC503.1 MEC503.1 MEC503.1 MEC503.3 MEC503.3 MEC503.4 MEC503.4 MEC503.4 MEC503.5 MEC503.5 MEC503.5 MEC503.6 MEC503.7 MEC503.7 MEC503.7 MEC503.8 MEC503.9 MEC503.9 MEC503.9 MEC503.9 MEC503.9 MEC503.9 MEC503.1 MEC503.0 MEC503.0 MEC503.1 MEC503.0 MEC503.0 MEC503.0 MEC503.0 MEC503.0 MEC503.0 MEC503.0 MEC503.0 MEC503.0 MEC503.1 MEC503.1 MEC503.1 MEC503.4 MEC503.4 MEC503.4 MEC503.4 MEC503.4 MEC503.4 MEC503.4 MEC503.4 MEC503.4 MEC504.2 MEC504.2 MEC504.2 MEC504.2 MEC504.3 MEC504.3 MEC504.3 MEC504.4 MEC504.4 MEC505.5
MEC502.2 function for a given system.
MECSO2.3 and tackle variety of problems in measuring instruments and Transfer function for a given system.
and tackle variety of problems in measuring instruments and Transfer function for a given system. Examine and break information into parts/structure by identifying process of measuring instruments operating at mechanical, electrical and electronic control level. Make inferences and find evidence to support generalizations for stabilizing of a given system by varying different variables like damping ratio, gain, poles, zeros, frequency etc for a given system under study. Present and defend opinions on error analysis by making judgments about information, validity related to measuring instruments integrating mathematical tools like the PID, root locus, bode plot, frequency response for determination of stability of a system Course Name:
electronic control level. Make inferences and find evidence to support generalizations for stabilizing of a given system by varying different variables like damping ratio, gain, poles, zeros, frequency etc for a given system under study. Production Process-III
MECS02.4 variables like damping ratio, gain, poles, zeros, frequency etc for a given system under study. Present and defend opinion on error analysis by making judgments about information, validity related to measuring instruments integrating mathematical tools like the PID, root locus, bode plot, frequency response for determination of stability of a system Course Code MECS03 Faculty Name: Demonstrate understanding of sheet metal forming and various stress systems involved in metal forming operations. MECS03.1 Design jigs and fixtures for a given applications. MECS03.2 Design jigs and fixtures for a given applications. MECS03.3 Get knowledge about non-conventional machining operations and its application areas. Illustrate advanced concepts such as rapid prototyping and Agile manufacturing. Course Name: Theory of Machines-II Course Code MECS04 Pradeep Suryavanshi / Zishan khan Year 3 Sem 5 Course Outcome MECS04.1 Describe working principles of clutches, Brakes and Dynamometers, Governors, Gear Trains and Gyroscope MECS04.2 Derive the expressions for torque in clutches, Brakes and Dynamometers, Gear Trains and Gyroscope. MECS04.3 Explain gyroscopic effect on Airplanes, Ships and Automobiles. MECS04.4 Analyse dynamic forces for Engine and Flywheel.
MECS02.5 mathematical tools like the PID, root locus, bode plot, frequency response for determination of stability of a system
Course Name: Course Code MECS03 Faculty Name: Dr. Rahul / Sudhakar A Year 3 Sem 5 Course Outcome MECS03.1 Demonstrate understanding of sheet metal forming and various stress systems involved in metal forming operations. MECS03.2 Design jigs and fixtures for a given applications. MECS03.3 Get knowledge about non-conventional machining operations and its application areas. MECS03.4 Illustrate advanced concepts such as rapid prototyping and Agile manufacturing. Course Name: Course Name: Theory of Machines- II Course Code MECS04 Faculty Name: Pradeep Suryavanshi / Zishan khan Year 3 Sem 5 Course Outcome MECS04.1 Describe working principles of clutches, Brakes and Dynamometers, Governors, Gear Trains and Gyroscope MECS04.2 Derive the expressions for torque in clutches, Brakes and Dynamometers, Gear Trains and Gyroscope. MECS04.2 Analyse dynamic forces for Engine and Flywheel. Course Name: Heat Transfer Course Code MECS05
Course Code MECS03 Teach Sem 5 Course Outcome
Description Course Code MECS03 Sem 5 Course Outcome
Paculty Name: Dr. Rahul / Sudhakar A Year 3 Sem 5 Course Outcome
Sem 5 Course Outcome
Course Outcome Course Outcome
MEC503.2 Design jigs and fixtures for a given applications. MEC503.3 Get knowledge about non-conventional machining operations and its application areas. MEC503.4 Illustrate advanced concepts such as rapid prototyping and Agile manufacturing. Course Name: Theory of Machines- II Course Code MEC504 Faculty Name: Pradeep Suryavanshi / Zishan khan Year 3 Sem 5 Course Outcome MEC504.1 Describe working principles of clutches, Brakes and Dynamometers, Governors, Gear Trains and Gyroscope MEC504.2 Derive the expressions for torque in clutches, Brakes and Dynamometers, Gear Trains and Gyroscope. MEC504.4 Analyse dynamic forces for Engine and Flywheel. Course Name: Heat Transfer Course Code MEC505
MEC503.3 Get knowledge about non-conventional machining operations and its application areas. MEC503.4 Illustrate advanced concepts such as rapid prototyping and Agile manufacturing. Course Name: Theory of Machines- II Course Code MEC504 Faculty Name: Pradeep Suryawanshi / Zishan khan Year 3 Sem 5 CO Number MEC504.1 Describe working principles of clutches, Brakes and Dynamometers, Governors, Gear Trains and Gyroscope MEC504.2 Derive the expressions for torque in clutches, Brakes and Dynamometers, Gear Trains and Gyroscope. Explain gyroscopic effect on Airplanes, Ships and Automobiles. MEC504.4 Analyse dynamic forces for Engine and Flywheel. Course Name: Heat Transfer Course Code MEC505
MEC503.4 Illustrate advanced concepts such as rapid prototyping and Agile manufacturing. Course Name: Theory of Machines-II Course Code MEC504 Faculty Name: Pradeep Suryavanshi / Zishan khan Year 3 Sm 5 CONumber Course Outcome MEC504.1 Describe working principles of clutches, Brakes and Dynamometers, Governors, Gear Trains and Gyroscope MEC504.2 Derive the expressions for torque in clutches, Brakes and Dynamometers, Gear Trains and Gyroscope MEC504.3 Explain gyroscopic effect on Airplanes, Ships and Automobiles. MEC504.4 Analyse dynamic forces for Engine and Flywheel. Course Name: Heat Transfer Course Code MEC505
Course Name: Theory of Machines-II Course Code MECSO4 Faculty Name: Pradeep Suryavanshi / Zishan khan Year 3 Sem 5 CO Number Codes MECSO4.1 Describe working principles of clutches, Brakes and Dynamometers, Governors, Gear Trains and Gyroscope MECSO4.2 Derive the expressions for torque in clutches, Brakes and Dynamometers, Gear Trains and Gyroscope MECSO4.3 Explain gyroscopic effect on Ariplanes, Ships and Automobiles. MECSO4.4 Analyse dynamic forces for Engine and Flywheel. Course Name: Heat Transfer Course Code MECSO5
Course Code
Course Code
Pradeep Suryavanshi / Zishan khan Year 3 Sem 5 Course Outcome
Year 3 Sem 5 CO Number Course Outcome MEC504.1 Describe working principles of clutches, Brakes and Dynamometers, Governors, Gear Trains and Gyroscope MEC504.2 Derive the expressions for torque in clutches, Brakes and Dynamometers, Gear Trains and Gyroscope. MEC504.3 Explain gyroscopic effect on Airplanes, Ships and Automobiles. MEC504.4 Analyse dynamic forces for Engine and Flywheel. Course Name: Heat Transfer Course Code MEC505
CO Number Course Outcome MECS04.1 Describe working principles of clutches, Brakes and Dynamometers, Governors, Gear Trains and Gyroscope MECS04.2 Derive the expressions for torque in clutches, Brakes and Dynamometers, Gear Trains and Gyroscope. MECS04.3 Explain gyroscopic effect on Airplanes, Ships and Automobiles. MECS04.4 Analyse dynamic forces for Engine and Flywheel. Course Name: Heat Transfer Course Code MECS05
MECS04.2 Derive the expressions for torque in clutches, Brakes and Dynamometers, Gear Trains and Gyroscope. MECS04.3 Explain gyroscopic effect on Airplanes, Ships and Automobiles. MECS04.4 Analyse dynamic forces for Engine and Flywheel. Course Name: Heat Transfer Course Code MECS05
MECS04.3 Explain gyroscopic effect on Airplanes, Ships and Automobiles. MECS04.4 Analyse dynamic forces for Engine and Flywheel. Course Name: Heat Transfer Course Code MECS05
MECS04.4 Analyse dynamic forces for Engine and Flywheel. Course Name: Heat Transfer Course Code MECS05
Course Name: Heat Transfer Course Code MECS0S
Course Code MECS05
Course Code MECS05
Par Dr. Dr. Dr. Caronai / Janifar shin
Faculty Name: Dr. R k Sarangi / Jenifer abin Year 3 Sem 5
CO Number Course Outcome
MECSOS.1 and transient.
Student analyses and estimates heat transfer and designs the equipment for heating and cooling such as furnace, heat treatment, engines,
MEC505.2 refrigerators, nuclear fuel elements, current carrying conductors, pipe carrying hot/cold fluids etc.
MEC505.3 Student develops mathematical model for each mode of heat transfer to analyze heat transfer in any typical heat exchange equipment.
MEC505.4 Student demonstrates and explains mechanism of boiling and condensation occurring in thermal processes.
MEC505.5 Student classifies, analyses and designs different types of heat exchangers.
Course Name . Business Communication and Ethics
Course Name: Business Communication and Ethics Course Code MEL501
Course Code MEL501 Faculty Name: Dr. Mohini / Renjith
Year 3 Sem 5
Year 3 Sem 5 CO Number Course Outcome
Year 3 Sem 5 CO Number Course Outcome MEL50.1 Utilize communication skills effectively in both oral and written form
CO Number Course Outcome
CO Number Course Outcome MEL501.1 Utilize communication skills effectively in both oral and written form
CO Number Course Outcome MEL501.1 Utilize communication skills effectively in both oral and written form MEL501.2 Demonstrate knowledge of professional and ethical responsibilities
CO Number Course Outcome MEL501.1 Utilize communication skills effectively in both oral and written form MEL501.2 Demonstrate knowledge of professional and ethical responsibilities MEL501.3 Develop an attitude for life-long learning MEL501.4 Manifest an entrepreneural approach MEL501.5 Participate and succeed in Campus placements and competitive examinations like GATE, CET.
CO Number Course Outcome MEL501.1 Utilize communication skills effectively in both oral and written form MEL501.2 Demonstrate knowledge of professional and ethical responsibilities MEL501.3 Develop an attitude for life-long learning MEL501.4 Manifest an entrepreneurial approach

		BE Mech
Course Name:	Machine Design -II	DE MCCII
Course Code	MEC701	
Faculty Name:	Dilip Manohar / Shreeprasad M	
Year	4 Sem 7	Course Outcome
CO Number MEC701.1	Select appropriate years for power transm	Course Outcome nission on the basis of given load and speed.
MEC701.2	Design gears based on the given condition	
MEC701.3	Select bearings for a given applications fr	rom the manufacturers catalogue.
MEC701.4	Select and/or design belts for given applic	ications.
MEC701.5	Design cam and follower and clutches	
Course Name:	CAD/CAM/CAE	
Course Code	MEC702	
Faculty Name:	Shreeprasad M / Deepika G 4 Sem 7	
Year CO Number	4 Sem 7	Course Outcome
MEC702.1	Identify proper computer graphics technic	
MEC702.2	Transform, manipulate objects and store a	
MEC702.3		ming applicable to CNC machines using modern tools i.e. Solidworks and MasterCAM ex engineering component using FEA analysis
MEC702.4 MEC702.5		ots in any real life applications for cost effective and fast prototyping
	1 1 71 0 0 1	7 11 71 0
Course Name:	Mechanical Utility Systems	
Course Code	MEC703 Cleta P / Pawan k	
Faculty Name: Year	4 Sem 7	
CO Number		Course Outcome
MEC703.1	Describe operating principles of compress	sors and pumps
MEC703.2	Compute performance of reciprocating/ro	
MEC703.3	Illustrate and analyze characteristic curve	
MEC703.4	interpret possibilities of energy conservat	tion in pumping and compressed air systems
Course Name:	Production Planning and Control	
Course Code	MEC704	
Faculty Name:	Sandeep Dasgupta / Mandar D	
Year CO Number	4 Sem 7	Course Outcome
GO Mumber		
MEC704.1	Students will be able to define and list do techniques, networking techniques.	own PPC and its components, inventory control and its methods, forecasting and various
	* ' ' '	rent production process, planning process, work order preparation, inventory control, forecasting, LPP
MEC704.2	and networking techniques.	
MEC704.3	control, forecasting, LPP, project manager	f management, quantitative techniques, logical and analytical skill to solve problems of inventory ment, networking.
MEC704.4		of PPC, EOQ, linear programming models, quantitative forecasting techniques, product scheduling an
MEC704.4 MEC704.5	cost analysis of network diagram. Students will be able to assess the scope	of improvement of project duration through network crashing.
Course Name:	Elective- I (Energy Management)	
Course Code	MEE7013	
Faculty Name: Year	Sabnis Sandeep 4 Sem 7	
CO Number		Course Outcome
MEE7013.1	Can dana and the able to an annual and and an	splain need for energy management and economics
MEE7013.2 MEE7013.3	Student will be able audit small installation	on or equipment for energy efficiency and suggest improvements.
MEE7013.2 MEE7013.3 MEE7013.4	Student will be able audit small installation	on or equipment for energy efficiency and suggest improvements. see of and analyze efficiency in thermal and electrical utilities.
MEE7013.3	Student will be able audit small installation Student will be able to describe important	on or equipment for energy efficiency and suggest improvements. see of and analyze efficiency in thermal and electrical utilities.
MEE7013.3 MEE7013.4 Course Name:	Student will be able audit small installatic Student will be able to describe importan Student will be able to explain need of will Elective- II (CFD)	on or equipment for energy efficiency and suggest improvements. see of and analyze efficiency in thermal and electrical utilities.
MEE7013.3 MEE7013.4 Course Name:	Student will be able audit small installatic Student will be able to describe importan Student will be able to explain need of will Elective- II (CFD) MEE7015	on or equipment for energy efficiency and suggest improvements. see of and analyze efficiency in thermal and electrical utilities.
MEE7013.3 MEE7013.4 Course Name:	Student will be able audit small installatic Student will be able to describe importan Student will be able to explain need of will Elective- II (CFD)	on or equipment for energy efficiency and suggest improvements. see of and analyze efficiency in thermal and electrical utilities.
MEE7013.3 MEE7013.4 Course Name: Course Code Faculty Name:	Student will be able audit small installatic Student will be able to describe important Student will be able to explain need of will be able to explain need o	on or equipment for energy efficiency and suggest improvements. ace of and analyze efficiency in thermal and electrical utilities. aste heat recovery and cogeneration
MEE7013.3 MEE7013.4 Course Name: Course Code Faculty Name: Year CO Number	Student will be able audit small installatic Student will be able to describe importan Student will be able to explain need of will Elective- II (CFD) MEE/015 Dr. P Nambiar 4 Sem 7 Student gams an overview or CFD, its app	on or equipment for energy efficiency and suggest improvements. In a diamaty of the service of and analyze efficiency in thermal and electrical utilities. In a diamaty of the service o
MEE7013.3 MEE7013.4 Course Name: Course Code Faculty Name: Year	Student will be able audit small installatic Student will be able to describe important Student will be able to explain need of will be able to explain need t	on or equipment for energy efficiency and suggest improvements. ace of and analyze efficiency in thermal and electrical utilities. aste heat recovery and cogeneration
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MEE7013.3 MEE7013.4 Course Name: Course Code Faculty Name: Year CO Number MEE7015.1	Student will be able audit small installatic Student will be able to describe important Student will be able to explain need of will be student will be able to explain need of will be student will be student will be student gams an overview or C.F.D., its application of the student devices and understands the mea Student devices and understandis the mea Student devices and understanding of different will be able to the student devices and understanding of different will be able to describe the student devices and understanding of different will be able to describe the student devices and understanding of different will be able to describe the student devices and understanding of different will be able to describe the student devices and understanding of different will be able to describe the student devices and understanding of different devices are deviced devices and understanding devices are deviced devices and understanding devices and understanding devices are deviced devices and understanding devices and understanding devices and understanding devices are deviced devices and understanding devices and understanding devices are deviced devices and understanding devices are deviced devi	on or equipment for energy efficiency and suggest improvements. the of and analyze efficiency in thermal and electrical utilities. aste heat recovery and cogeneration Course Outcome Outcations, its realizer position as compared to traditional experimental and theoretical methods used one and their implementation in numerical scheme, working of a typical commercial software and its anning of terms in the set of governing equations, viz. conservation of mass, momentum and energy. Ferent types of structured and unstructured grids, classification of differential equations, discretizatio quations viz. Taylor series, variational method, Weighted residual method and control of finite
MEE7013.3 MEE7013.4 Course Name: Course Code Faculty Name: Year CO Number MEE7015.1 MEE7015.2	Student will be able audit small installatic Student will be able to describe important Student will be able to explain need of will be able to explain need to be able to explain need to explain the analysis, physical boundary conditions tructure. Student gams an overview or CFD, Its app in the analysis, physical boundary conditions that the able to explain the able to e	on or equipment for energy efficiency and suggest improvements. tee of and analyze efficiency in thermal and electrical utilities. aste heat recovery and cogeneration Course Outcome Discations, its relative position as compared to traditional experimentar and theoretical methods used ons and their implementation in numerical scheme, working of a typical commercial software and its uning of terms in the set of governing equations, viz. conservation of mass, momentum and energy. Fremet types of structured and unstructured grids, classification of differential equations, discretizatio quations viz. Taylos series, variational method, Weighted residual method and control or finite action technique.
MEE7013.3 MEE7013.4 Course Name: Course Code Faculty Name: Year CO Number MEE7015.1 MEE7015.2	Student will be able audit small installari. Student will be able to describe important Student will be able to explain need of w. Elective- II (CFD) MEE/O15 Dr. P Nambiar 4 Sem 7 Student gams an overview or C-PJ, its app in the analysis, physical boundary conditis structure. Student derives and understands the mea Student develops an understanding of difficoncept and methods of discretizing the evolume method and under and over relax. Student derives the stream function vortidetermine pressure in viscous flow, learns	on or equipment for energy efficiency and suggest improvements. the of and analyze efficiency in thermal and electrical utilities. aste heat recovery and cogeneration Course Outcome Dictations, its relative position as compared to traditional experimentar and theoretical methods used ons and their implementation in numerical scheme, working of a typical commercial software and its uning of terms in the set of governing equations, viz. conservation of mass, momentum and energy. Ferent types of structured and unstructured grids, classification of differential equations, discretizatio equations viz. Taylor series, variational method, Weighted residual method and control or finite aution technique. City formulation for incompressible flow, understands SIMPLE and SIMPLER algorithms, learns how to skeynolds averaged equations in turbulent flow and turbulence modelling.
MEE7013.3 MEE7013.4 Course Name: Course Code Faculty Name: Year CO Number MEE7015.1 MEE7015.2	Student will be able to describe important Student will be able to describe important Student will be able to explain need of will Elective- II (CFD) MEE/O15 Dr. P Nambiar 4 Sem 7 Student gams an overview of CFD, its app in the analysis, physical boundary conditions to the about the structure. Student derives and understands the mea Student derives and understanding of difficoncept and methods of discretizing the evolume method and under and over relax Student derives the stream function vortic determine pressure in viscous flow, learns Student derives the stream function vortic determine pressure in viscous flow, learns Student derives the stream function vortic determine pressure in viscous flow, learns Student derives the viscous flow, learns	on or equipment for energy efficiency and suggest improvements. the of and analyze efficiency in thermal and electrical utilities. aste heat recovery and cogeneration Course Outcome Interactions, its retainve position as compared to traditional experimental and theoretical methods used to said the implementation in ununerical scheme, working of a typical commercial software and its aning of terms in the set of governing equations, viz. conservation of mass, momentum and energy. Ferent types of structured and unstructured grids, classification of differential equations, discretization equations viz. Taylor series, variational method, Weighted residual method and control or finite aution technique. city formulation for incompressible flow, understands SIMPLE and SIMPLER algorithms, learns how to SR Reynolds averaged equations in turbulent flow and turbulence modelling.
MEE7013.3 MEE7013.4 Course Name: Course Code Faculty Name: Year CO Number MEE7015.1 MEE7015.2	Student will be able audit small installatic Student will be able to describe important Student will be able to explain need of will be able to explain need to to explain	on or equipment for energy efficiency and suggest improvements. tee of and analyze efficiency in thermal and electrical utilities. aste heat recovery and cogeneration Course Outcome Interactions, its retainve position as compared to traditional experimental and theoretical methods used in one and their implementation in numerical scheme, working of a typical commercial software and its aning of terms in the set of governing equations, viz. conservation of mass, momentum and energy. Terent types of structured and unstructured grids, classification of differential equations, discretizatio equations viz. Taylor series, variational method, Weighted residual method and control or finite aution technique. city formulation for incompressible flow, understands SIMPLE and SIMPLER algorithms, learns how to SR Reynolds averaged equations in turbulent flow and turbulence modelling. rmulation and solves steady one, two and three dimensional diffusion problems, unsteady one and two and two dimensional convection-diffusion problems.
MEE7013.3 MEE7013.4 Course Name: Course Code Faculty Name: Year CO Number MEE7015.1 MEE7015.2	Student will be able audit small installatic Student will be able to describe important Student will be able to explain need of will be able to explain need to to explain	on or equipment for energy efficiency and suggest improvements. tee of and analyze efficiency in thermal and electrical utilities. aste heat recovery and cogeneration Course Outcome Dications, its relative postion as comparent to traditional experimental and meoretical methods used one and their implementation in numerical scheme, working of a typical commercial software and its aning of terms in the set of governing equations, viz. conservation of mass, momentum and energy. Ferent types of structured and unstructured grids, classification of differential equations, discretizatio equations viz. Taylor series, variational method, Weighted residual method and control or finite aution technique. City formulation for incompressible flow, understands SIMPLE and SIMPLER algorithms, learns how to Reynolds averaged equations in turbulent flow and turbulence modelling. Trunulation and solves steady one, two and three dimensional diffusion problems, unsteady one and two dimensional convection-diffusion problems, unsteady one and two dimensional convection-diffusion problems, unsteady one and two dimensional convection-diffusion problems, unsteady one and two
MEE7013.3 MEE7013.4 Course Name: Course Code Faculty Name: Year CO Number MEE7015.1 MEE7015.2 MEE7015.3 MEE7015.4 MEE7015.5	Student will be able to describe important Student will be able to describe important Student will be able to explain need of will be able to the able to be able to the able to t	on or equipment for energy efficiency and suggest improvements. tee of and analyze efficiency in thermal and electrical utilities. aste heat recovery and cogeneration Course Outcome Interactions, its retainve position as compared to traditional experimental and theoretical methods used in one and their implementation in numerical scheme, working of a typical commercial software and its aning of terms in the set of governing equations, viz. conservation of mass, momentum and energy. Terent types of structured and unstructured grids, classification of differential equations, discretizatio equations viz. Taylor series, variational method, Weighted residual method and control or finite aution technique. city formulation for incompressible flow, understands SIMPLE and SIMPLER algorithms, learns how to SR Reynolds averaged equations in turbulent flow and turbulence modelling. rmulation and solves steady one, two and three dimensional diffusion problems, unsteady one and two and two dimensional convection-diffusion problems.
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MEE7013.3 MEE7013.4 Course Name: Course Code Faculty Name: Year CO Number MEE7015.1 MEE7015.2 MEE7015.3 MEE7015.4 MEE7015.6 Course Name: Course Code Faculty Name:	Student will be able audit small installatic Student will be able to describe important Student will be able to explain need of will be able to explain a be able to explain a be able to explain a be able to explain the analysis, physical boundary conditions tructure. Student derives and understands the mea Student develops an understanding of difficance and under and over relax student derives and understands of discretizing the evolume method and under and over relax Student derives the stream function vortic determine pressure in viscous flow, learns Student understands the finite volume for dimensional diffusion problems and one a Student discretizes and solves the governidimensional conduction, two and three didimensional convection. Elective—III (Piping Engineering) MEE/O17 Mahesh Rajwade	on or equipment for energy efficiency and suggest improvements. tee of and analyze efficiency in thermal and electrical utilities. aste heat recovery and cogeneration Course Outcome Interactions, its retainve position as compared to traditional experimental and theoretical methods used to said their implementation in numerical scheme, working of a typical commercial software and its aning of terms in the set of governing equations, viz. conservation of mass, momentum and energy. Ferent types of structured and unstructured grids, classification of differential equations, discretizatio equations viz. Taylor series, variational method, Weighted residual method and control or finite aution technique. city formulation for incompressible flow, understands SIMPLE and SIMPLER algorithms, learns how to SR Reynolds averaged equations in turbulent flow and turbulence modelling. rmulation and solves steady one, two and three dimensional diffusion problems, unsteady one and two and two dimensional convection-diffusion problems in steady and unsteady one
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MEE7013.3 MEE7013.4 Course Name: Course Code Faculty Name: Year CO Number MEE7015.1 MEE7015.2 MEE7015.3 MEE7015.4 MEE7015.5 Course Name: Course Code Faculty Name: Year CO Number	Student will be able audit small installant Student will be able to describe importan Student will be able to explain need of w. MEE/015 Dr. P. Nambiar 4 Sem 7 Student gams an overview or C.P.J. its app in the analysis, physical boundary conditions structure. Student develops an understands the mea Student develops an understands the mea Student develops an understands the mea Student develops an understands the ovolume method and under and over relax. Student develops an understands of discretizing the evolume method and under and over relax. Student derives the stream function vortic determine pressure in viscous flow, learns Student understands the finite volume for dimensional diffusion problems and one a Student discretizes and solves the governi dimensional conduction, two and three didimensional convection. Elective-III (Piping Engineering) MEE/017 Mahesh Rajiwade 4 Sem 7	on or equipment for energy efficiency and suggest improvements. tee of and analyze efficiency in thermal and electrical utilities. aste heat recovery and cogeneration Course Outcome Occurse Outcome
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MEE7013.3 MEE7013.4 Course Name: Course Code Faculty Name: Year CO Number MEE7015.1 MEE7015.2 MEE7015.3 MEE7015.4 MEE7015.5 Course Name: Course Code Faculty Name: Year CO Number MEE7017.1 MEE7017.2	Student will be able audit small installatic Student will be able to describe important Student will be able to explain need of will be able to explain a property of the able to explain a	on or equipment for energy efficiency and suggest improvements. the of and analyze efficiency in thermal and electrical utilities. aste heat recovery and cogeneration Course Outcome The provided of the
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