Department of Mechanical , CAY- (Even semester, 2019-20)

	PROGRAM			
	At the end of the program graduates will be able to:			
PSO1	Apply engineering knowledge & analytical skills to design components for applications in the field of machine tools and thermal & fluid systems.			
PSO2	Carry out experiments on models & prototypes of mechanical systems to evaluate their performance.			
PSO3	Use professional best engineering practices & strategies for operation & maintenance of mechanical systems & processes.			

Course Name:	Applied Mathematics IV**		
Course Code	MEC401		
Faculty Name:	Dr. Revathy		
Year	2	Sem	4

CO Number	Course Outcome
MEC401.1	Students will be able to obtain Eigen values and Eigen vectors for a given square matrix
MEC401.2	Students will be able to infer properties of Eigen values and Eigen vectors, check if a matrix is derogatory or not and obtain pdf and cdf of discrete and continuous random variabless.
MEC401.3	Students will be able to Construct diagonal matrices using the concept of similarity, verify Cayley- Hamilton theorem, obtain functions of square matrices and determine nature of the quadratic form and apply it.
MEC401.4	Students will be able to use Z-test, t- test, F-test and Chi-square test to test hypotheses, find work done by applying divergence and curl.
MEC401.5	Students will be able to evaluate vector integration using different theorems, use Linear Programming methods to solve optimization problems
MEC401.6	Students will be able to Chi-square test to test to check independence of attributes and 'goodness of fit', obtain probabilities and z-values for normal distributions, apply Big – M method and Dual Simplex method to optimize an LPP and analyze solutions obtained

Course Name:	Fluid Mechanics*		
Course Code	MEC402		
Faculty Name:	Juned A./Dr. Pawar		
Year	2	Sem	4

CO Number	Course Outcome
MEC402.1	Define fluid properties, types of flows and the governing laws of fluid mechanics.
MEC402.2	Explain basic concepts required in the analysis of the fluid flow systems.
MEC402.3	Apply the fundamental principles and governing equations to fluid at rest and in motion.
MEC402.4	Analyze the fluid flow systems to obtain the forces acting on it and the exchanges of the mass and energy.
MEC402.5	Evaluate the suitability of a fluid flow system for the given conditions.
MEC402.6	Design a working model to demonstrate a principle or application of principles in fluid mechanics.

Course Name:	Industrial Electronics*		
Course Code	MEC403		
Faculty Name:	Madhavi Pednekar		
Year	2	Sem	3

CO Number	Course Outcome
MEC403.1	assimilate information on various analog & digital circuits and power electronic semiconductor devices.
MEC403.2	identify and explain the basic functioning of different types of analog & digital integrated circuits, microprocessor and microcontroller with their applications.
MEC403.3	demonstrate the working of digital logical circuits, operational amplifier and timer IC555 in various configurations of analog and digital applications.
MEC403.4	identify and compare the use of selected analog, digital, power electronic semiconductor device, microprocessor and microcontroller for particular applications.
MEC403.5	acquaint with the basics of microcontroller MSP430 programming to analyse the characteristics of electronic semiconductor device, electrical machines, digital circuits for applications like speed control, light dimmer, switching, verification of outputs etc. (Apply) (Analyze)
MEC403.6	develop small analog and digital circuits/build small projects for a given specifications.

Course Name:	Production Process II*		
Course Code	MEC404		
Faculty Name:	Deepika G./Sudhakar A.		
Year	2	Sem	4

CO Number	Course Outcome
MEC404.1	Define conventional and non–conventional manufacturing processes (Metal removal v/s metal deposition)
MEC404.2	llustrate mechanics of machining and forming processes using cutting & forming tools for Engineering materials.
MEC404.3	Identify different forces, tool life, material utilization and different processes for manufacturing a suitable product.
MEC404.4	Classify different manufacturing process to optimize machining variables for a suitable machined product.
MEC404.5	Determine power requirement's in traditional and non-traditional manufacturing processes.
MEC404.6	Discuss assembly components manufactured through traditional and non-traditional processes.

Course Name:	Kinematics of Machinery*		
Course Code	MEC405		
Faculty Name:	Juned A./Sachin S.		
Year	2	Sem	4

CO Number	Course Outcome
MEC405.1	Define various components of mechanisms
MEC405.2	Devlop mechanisms to provide specific motion
MEC405.3	Draw velocity and acceleration diagrams for various mechanisms
MEC405.4	Draw cam profile for specific follower motion
MEC405.5	Analyze forces in various gears
MEC405.6	Select appropriate power transmission for specific application

Course Name:	Data Base and Information Retrieval*		
Course Code	MEL401		
Faculty Name:	Hemant/Swapnil G.		
Year	2	Sem	3

CO Number	Course Outcome

MEL401.1	Explain the basics of DBMS, RDBMS and design the data model and logical schema of databases including the E-R method
MEL401.2	Write basic SQL commands like DDL, DML and DCL along with its syntax.
MEL401.3	Apply SQL - the standard language for basic and nested queries.
MEL401.4	Analyze functional dependencies during design of the database
MEL401.5	Assess the integration of SQL and VB needed to develop database application
MEL401.6	Develop a database application individually through a case study (business scenario) towards design

Course Name:	Fluid Mechanics*		
Course Code	MEL402		
Faculty Name:	Juned A./Dr. Pawar		
Year	2	Sem	4
CO Number	Course Outcome		
MEL402.1	Define the least count, the range of measurement, different errors involved etc. in the measurements of the fluid flow parameters.		
MEL402.2	Demonstrate use of different measuring techniques and instruments required in the measurement of fluid flow parameters.		
MEL402.3	Apply the concepts/principles learned e. g. Bernoulli theorem, momentum principle, coefficient of pressure, lift etc. in practical situations.		
MEL402.4	Analyze the readings, plot the relevant parameters, interpret the results and conclude, thereby realizing the implications of assumptions made in the theoretical analysis.		
MEL402.5	Evaluate the possible solutions and choose the most appropriate for a given situation/problem. (selection of pipe fittings, valves)		
MEL402.6	Design a working model to demonstrate a principle or application of principles in fluid mechanics.		

Course Name:	Industrial Electronics*		
Course Code	MEL403		
Faculty Name:	Madhavi		
Year	2	Sem	4
CO Number	Course Outcome		
MEL403.1	Students will be able to identify and operate various electronic instruments and electronic components efficiently with an ease & thorough understanding to perform well in the laboratory.		
MEL403.2	Students will be able to built and test the characteristics/truth table of various analog & digital circuits and power electronic semiconductor devices.		
MEL403.3	Students will be able to identify and verify the use of selected analog, digital andpower electronic semiconductor devices for industrial applications		
MEL403.4	Students will be able to demonstrate the working of operational amplifier and timer IC555 in various configurations of analog applications.		
MEL403.5	Students will be able to analyse the characteristics of electronic semiconductordevice, electrical machines, digital circuits using basic programming of microcontroller MSP430 for various applications like motor speed control, light dimmer, switching, verification of truth table etc.		
MEL403.6	Students will be able to develop and demonstrate their thinking ability by designing simple applications to built around these components . (Mini project application design)		

Course Name:	Kinematics of Machinery*
Course Code	MEL404
Faculty Name:	Juned A./Sachin S.

Year	2	Sem	4

CO Number	Course Outcome
MEL404.1	Find velocity by instantaneous center method
MEL404.2	Draw velocity and acceleration diagrams for four bar mechanism by relative method
MEL404.3	Draw velocity and acceleration diagrams for Slider crank mechanism by relative method
MEL404.4	Draw Cam profile for the specific follower motion
MEL404.5	Plot displacement-time, velocity-time, acceleration-time cam profiles
MEL404.6	Develop and build mechanisms to provide specific motion

Course Name:	Mechanical Measurements and Control
Course Code	MEC601
Faculty Name:	Mahesh R. /Chavan B.

Year	3	Sem	6

CO Number	Course Outcome
MEC601.1	Recall the basic concepts learnt in Industrial electronics, applied mechanics and math's as applicable to transistors, diodes, microcontrollers, mass, work energy principles, velocity, accelerations, levers and Laplace transform along with differential equations.
MEC601.2	Distinguish the basic methodologies to measure Displacement motion (linear, rotary, turbulence, thermal and as feedback to control the output) using transducers.
MEC601.3	Choose the appropriate transducer to measure the required system parameters like (displacement, speed, acceleration, force, flow, temperatures etc) validating the specifications and handshaking between the interfacing components.
MEC601.4	Examine the fundamental laws, governing equations and working principles to deduce the equations for (Displacement sensed by Transducers, input to output stability relation between intermediate elements, feedback errors, work, power, etc) analysis of a given system.
MEC601.5	Judge between different criteria's in a given system to map a suitable component to get expected results by solving for various parameter's like (analog output setting, fluctuating resistance current and voltages to represent Displacement in a transduced form etc) in the analysis of transfer function numerically.
MEC601.6	Build new updated and comparative data between various measuring criteria's and parameters for a better stabilized control system, incorporating feedback. (Like Transfer function, performance curves, S-plots, stability criteria's, Specifications from manufacturer etc).

Course Name:	Machine Design I
Course Code	MEC602
Faculty Name:	Georgena K. /Swapnil G.

Year	3	Sem	6

CO Number	Course Outcome
MEC602.1	State basic considerations and standards required in designing basic machine components.
MEC602.2	Interpret the modes of failure of a component subjected to various loading conditions.
MEC602.3	Calculate the size of the machine components based on strength criteria referring to design data books.
MEC602.4	Analyze the stresses induced in machine component using application software.
MEC602.5	Assess the actual machine component for the forces it is subjected to and justify the size of the component.
MEC602.6	Propose the design solution for the given Problem.

Course Name:	Finite Element analysis
Course Code	MEC603
Faculty Name:	Sheeprasad M. /Dr. Rao

Year	3	Sem	6

CO Number	Course Outcome
MEC603.1	Solve differential equations using weighted residual methods
MEC603.2	Develop the finite element equations to model engineering problems governed by second order differential equations
MEC603.3	Apply the basic finite element formulation techniques to solve engineering problems by using one dimensional elements
MEC603.4	Apply the basic finite element formulation techniques to solve engineering problems by using two dimensional elements
MEC603.5	Apply the basic finite element formulation techniques to find natural frequency of single degree of vibration system
MEC603.6	Use commercial FEA software ANSYS Mechanical APDL, to solve problems related to mechanical engineering

Course Name:	Refrigeration and Air Conditioning		
Course Code	MEC604		
Faculty Name:	Dr. Padiya /Pavan K.		
Year	3	Sem	6

CO Number	Course Outcome
MEC604.1	State different terminologies and components used in refrigeration and air conditioning systems
MEC604.2	Explain the different terminologies, components and working principle of refrigeration and air conditioning unit
MEC604.3	Interpret the performance of refrigeration and air conditioning unit at given operating conditions.
MEC604.4	Compare the performance of refrigeration and air conditioning unit at different operating conditions
MEC604.5	Select refrigeration and air conditioning unit for given operating conditions
MEC604.6	Design basic air conditioning systems

Course Name:	Mechatronics		
Course Code	MEDLO6021		
Faculty Name:	Deepika G.		
Year	3	Sem	6

CO Number	Course Outcome
MEDLO6021.1	Learner will be able to identify the suitable sensor, actuator, Drives and logic controls for a mechatronics system.
MEDLO6021.2	Learner will be able to describe the working of different hydraulic circuits /Pneumatic circuits, Drives or Actuators for a customised appllication.
MEDLO6021.3	Learner will be able to relate the levels in automation from Pneumatic to Electro_Pneumatic and to PLC systems, with respect to Control.
MEDLO6021.4	Learner will be able to Analyse continuous control logics for standard input condition
MEDLO6021.5	Learner will be able to choose suitable sequence /process /logic for any Industrial Application to provide solution using PLC.
MEDLO6021.6	Learner will be able to Design a mechatronic system for imitating day-to-day automation system.

Course Name:	Robotics		
Course Code	MEDLO6022		
Faculty Name:	Chavan.B		
Year	3	Sem	6

CO Number	Course Outcome
MEDLO6022.1	Identify basic Anatomy of a robot and its control
MEDLO6022.2	Classify various design principles of robotics through forward and inverse kinematics applied to workspace analysis and trajectory planning.
MEDLO6022.3	Explain robot applications in Industry, based on Vision inspection and material handling designs.
MEDLO6022.4	Select suitable sensors and actuators for interfacing, subject to its static and dynamic characteristics.
MEDLO6022.5	Compare various aspects of a robot and its role, as a Humanoid.
MEDLO6022.6	Solve a task problem for any DOF manipulator using Roboanalyzer or any computational software.

Course Name:	Industrial Automation		
Course Code	MEDLO6023		
Faculty Name:	Sudhakar		
Year	3	Sem	6

CO Number	Course Outcome
MEDLO6023.1	Relate basics of industrial automation.
MEDLO6023.2	Classify various Levels of automation (mechanisation V/s automation)
MEDLO6023.3	Apply USA principles to integrate various automation functional elements to provide solution for a defined problem.
MEDLO6023.4	llustrate Control in an automated system using electro-pneumatic and Hydraulic circuit's customised application.
MEDLO6023.5	Develop applicability of PLC programming in process industry to control discrete and continuous signals.
MEDLO6023.6	Combine Automation elements to form a cellular or a FMS system using robot.

Course Name:	Metrology and Quality Engineering		
Course Code	MEC601		
Faculty Name:	Mahesh R. /Chavan B.		
Year	3	Sem	6

CO Number	Course Outcome
MEC601.1	Identify significance of Inspection techniques, construction & working of measuring instruments in relation with concept of Quality and Quality control.
MEC601.2	Classify and select Inspection Technique and Measuring Instruments in lias with manufacturing Process and also select appropriate SQC Tool according to the specific applications and type of data acquired
MEC601.3	Practice Measurement activities using appropriate measurement tool, apply suitable sqc tool and prepare a control chart from statistical data
MEC601.4	Calculate the gauge dimension and determine tolerances depending upon the fit required
MEC601.5	Construct the control chart by setting up upper and lower control limits and interpret the results obtained from control charts
MEC601.6	Asses the process on the basis of the control chart results in terms of process capability

Course Name:	Metrology and Quality Engineering		
Course Code	MEL601		
Faculty Name:	Mahesh R. /Chavan B.		
Year	3	Sem	6

CO Number	Course Outcome
MEL601.1	Identify different measuring instruments according to their application, range and least count and the type of reading i.e. Attribute or variable

CO Number	Course Outcome
MEL601.2	Select appropriate measuring instrument for a specific application.
MEL601.3	Practice the measurement activity for various shape and sizes of the job
MEL601.4	Examine the critical dimensions of the part and select the quality control tool from the data
MEL601.5	Prepare control charts from the available type of the data
MEL601.6	Interpret the control chart and conclude whether the process under statistical control

Course Name:	Machine Design I	
Course Code	MEL602	
Faculty Name:	Georgena K. /Swapnil G.	
Year	3	Sem	6

CO Number	Course Outcome
MEL602.1	Describe basic considerations needed in designing machine components
MEL602.2	Estimate the dimesions of the components of machine elements using theories of failure.
MEL602.3	Convert de sign dimensions into working /manufacturing drawings
MEL602.4	Demonstrate the standardisation of designed dimensions using design data book.
MEL602.5	Analyse the cross-section of the components which is likey to fail and draw failure diagram.
MEL602.6	Validate the design of the machine components using analysis Software.

Course Name:	Finite Element Analysis	
Course Code	MEL603	
Faculty Name:	Sheeprasad M. /Dr. Rao	
Year	3	Sem	6

CO Number	Course Outcome
MEL603.1	To study the applicability of FEM to a range of Engineering Problems.
MEL603.2	To acquaint with applications of numerical techniques for solving problems using weighted residual methods
MEL603.3	To be able to apply FEM concepts to any engineering problems and predict the performance of the system under certain specific characteristic
MEL603.4	To learn and use leading FEA software tool in market i.e. ANSYS Mechanical APDL and perform industry like analysis through course project
MEL603.5	To apply FEA concepts to solve 1D, 2D problems and understand coordinate transformation matrix, Jacobean matrix
MEL603.6	To apply FEA concepts to solve vibration problems and find out Eigen values and Eigen vectors

Course Name:	Refrigeration and Air Conditioning	
Course Code	MEL604	
Faculty Name:	Dr. Padiya /Pawan K.	
Year	3	Sem	6

CO Number	Course Outcome
MEL604.1	Remember various components used in and functioning of refrigeration and airconditioning system

MEL604.2	Explain the proper process to carry out experiment, do measurements, use of p-h diagram and use of psychrometric chart
MEL604.1	Apply thermodynamic principles to determine parameters such as COP, TR, power, pulldown period
MEL604.3	Analyze the system by plotting the curves and making conclusion
MEL604.1	Compare the system for set of readings
MEL604.4	Determine parameters related to design of refrigeration and airconditioning sytems

Course Name:	Mechatronics Lab		
Course Code	MEL605		
Faculty Name:	Deepika G. / Chavan B.		
Year	3	Sem	6
CO Number	Course Outcome		
MEL605.1	Label functional components required for interfacing in a pneumatic, Electro–Pneumatic and a control based systems (PLC or microcontroller).		
MEL605.2	Classify levels of automation from mechanization to automation using transducers, control elements, hard wiring to soft wiring blended with programming.		
MEL605.3	Develop working model for a suitable application using elements under automation (Electro-Pneumatic, PLC, Microcontroller, IOT and robotics).		
MEL605.4	Distinguish between Discrete and Analog control system using electrical Drives for a suitable application under automation.		
MEL605.5	Determine feasibility of an automation solution through Simulators and Emulators. (FestoSIM, PLC LOGO soft, DH parameters in "Roboanalyzer" for robotic arm and Traine		
MEL605.6	Combine automation with IOT using Internet (Ethernet shield) to have remote control.		

Course Name:	Design of Mechanical Systems		
Course Code	MEC801		
Faculty Name:	Dr. Suryavanshi /Johnson N.		
Year	4	Sem	8
CO Number	Course Outcome		
MEC801.1	The students will be able to Identify the different parts of the hoisting mechanism, belt conveyors, gear boxes, diesel & petrol engine and pumps.		
MEC801.2	The students will be able to explain the operating principles of Hoisting mechanism, belt conveyors, gear boxes, diesel & petrol engine and pumps.		
MEC801.3	The students will be able to use the basic components to form a suitable power transmission system to satisfy given requirements.		
MEC801.4	The students will be able to finalize the dimensions of the system components .		
MEC801.5	The students will be able to select appropriate prime movers for the system.		
MEC801.6	The students will be able to deisgn the hoisting mechanism, belt conveyors, gear boxes, diesel & petrol engine and pumps with a specific application.		

Course Name:	Design of Mechanical Systems		
Course Code	MEL801		
Faculty Name:	Dr. Suryavanshi /Johnson N.		
Year	4	Sem	8
CO Number	Course Outcome		
MEL801.1	The students will be able to Identify and assemble the different elements of the Hoisting mechanism, belt conveyors, gear boxes, diesel & petrol engine and pumps.		
MEL801.2	The students will be able to state the applications of Hoisting mechanism, belt conveyors, gear boxes, diesel & petrol engine and pumps.		
MEL801.3	The students will be to apply the Concepts of system design.		
MEL801.4	The students will be able to finalize the dimensions of hoisting mechanism of EOT crane.		

MEL801.5	The students will be able to select appropriate prime movers for the conveyor.
MEL801.6	The students will be able to design the system for a specific requirement.

Course Name:	Industrial Engineering and Management
Course Code	MEC802
Faculty Name:	Sandeep D./Sabnis S.
Year	4 **Sem** 8

CO Number	Course Outcome
MEC802.1	Students will be able to list down objective of industrial engineering, various FMS layouts, name the contributors of IE, define productivity & factors influencing productivity, value engg., & value analysis, work study, method study, work measurement, ergonomics and recall concepts of PMTS, MOST etc
MEC802.2	Students will be able to describe the factors influencing the productivity, explain the productivity improvement techniques, bio-mechanics, anthropometry, compare the value engg.& value analysis, illustrate significance of ergonomics in IE, Group Technology, Flexible manufacturing Lean Manufacturing.
MEC802.3	Students will be able to compute productivity, performance rating, standard time of work, wage of a worker.
MEC802.4	Students will be able to compare value analysis-value engg., job evaluation-merit rating, production-productivity, method study-time study, flexible manufacturing-lean manufacturing.
MEC802.5	Students will be able to develop facility location, wage structure, plant location, ergonomically designed benches in the class.
MEC802.6	Students will be able to justify facility design decision.

Course Name:	Power Engineering
Course Code	MEC803
Faculty Name:	Nilesh Gaware / Cleta Pereira
Year	4 **Sem** 8

CO Number	Course Outcome
MEC803.1	Describe boilers, boiler mountings and accessories, steam, gas and hydraulic turbine and pumps.
MEC803.2	Differentiate boilers, boiler mountings and accessories.
MEC803.3	Apply thermodynamics and kinematics principles to turbo machines with applications of impact of jet.
MEC803.4	Calculate the performance of boiler, steam, gas and hrdraulic turbines and pumps, heat interactions in combustion of reactive mixtures.
MEC803.5	Analyze characteristic curves of pumps
MEC803.6	Design the pumping system for an application

Course Code	MEL802
Faculty Name:	Nilesh Gaware / Cleta Pereira
Year	4 **Sem** 8

CO Number	Course Outcome
MEL802.1	Identify boilers, boiler mountings and accessories
MEL802.2	Compute the performance of boiler
MEL802.3	Demonstrate the trail of impulse, reaction, Reciprocating and Centrifugal pump
MEL802.4	Sketch velocity triangles of impulse/reaction turbines.
MEL802.5	Analyze the characteristic curves of pumps

MEL802.6	Justify the selection of pump

Course Name:	Power Plant Engineering		
Course Code	MEDLO8041		
Faculty Name:	Nilesh Gaware		
Year	4	Sem	8

CO Number	Course Outcome
MEDLO8041.1	Identify boilers, boiler mountings and accessories
MEDLO8041.2	Compute the performance of boiler
MEDLO8041.3	Demonstrate the trail of impulse, reaction, Reciprocating and Centrifugal pump
MEDLO8041.4	Sketch velocity triangles of impulse/reaction turbines.
MEDLO8041.5	Analyze the characteristic curves of pumps
MEDLO8041.6	Justify the selection of pump

Course Name:	Rapid Prototyping		
Course Code	MEDLO8042		
Faculty Name:	Sheeprasad M.		
Year	4	Sem	8

CO Number	Course Outcome
MEDLO8042.1	Select feasible Rapid Prototyping Process for product development
MEDLO8042.2	Classify different Rapid Prototyping Processes according to application areas
MEDLO8042.3	Choose a typical Rapid Prototyping process for a given set of condition
MEDLO8042.4	Examine the material requirements for RP Processes
MEDLO8042.5	Assess efficiencies and correctness of RP processes for a particular application
MEDLO8042.6	Construct a prototype using a typical RP process

Course Name:	Renewable Energy Systems		
Course Code	MEDLO8043		
Faculty Name:	Pawan K		
Year	4	Sem	8

CO Number	Course Outcome
MEDLO8043.1	Students are able to state and define various terms in renewable energy sources
MEDLO8043.2	Students are able to exemplify and illustrate global and national scenario, potential, hurdles, policies of renewable energy sources, considerations in design, basic principle,
MEDLO8043.1	Students are able to apply the theory to determine parameters related to a renewable energy system
MEDLO8043.2	Students are able to read and plot the performance curves of renewable systems
MEDLO8043.1	Students are able to compare and conclude on the system giving best performance under given conditions
MEDLO8043.2	Students are able to determine parameters related to design of renewable energy systems.

Course Name:	Energy Management in Utility Systems		
Course Code	MEDLO8044		
Faculty Name:	Dr. Padiya		
Year	4	Sem	8

CO Number	Course Outcome
MEDLO8044.1	Remembers various Energy policy, Conservation Act and its standards
MEDLO8044.2	Understand the process of Energy Audit
MEDLO8044.3	Apply suitable Energy conservation techniques
MEDLO8044.4	Consolidate various options for Energy conservation for given requirement.
MEDLO8044.5	Evaluate the performance of Energy consuming equipments
MEDLO8044.6	Estimate the energy Saving potential and related costing

Course Name:	Project Management		
Course Code	ILO8021		
Faculty Name:	Sandeep Sabnis		
Year	4	Sem	8

CO Number	Course Outcome
ILO8021.1	Remember the definitions and concepts related to project management foundation at various stages.
ILO8021.2	Understanding the principles, processes, different tools and techniques of project management.
ILO8021.3	Apply the risk management plan, Project Procurement plan, contract management and analyse the role of stakeholders.
ILO8021.4	Analyze the learning and understand techniques for Project planning, scheduling and Execution Control.
ILO8021.5	Evaluate project progress with PMIS and techniques like Earned value management and Control ratios.
ILO8021.6	Create WBS, Budget and Time Plan for a project and learn to apply various monitoring and control techniques that are practiced in Industry.

Course Name:	Finance Management		
Course Code	ILO8022		
Faculty Name:	sandeep dasgupta		
Year	4	Sem	8

CO Number	Course Outcome
ILO8022.1	Students will be able to describe Indian Financial System, its components and functions, concept of risk and return, various financial statements, factors of working capital and dividend.
ILO8022.2	Students will be able to distinguish between money market-capital market, share-denture, compounding-discounting, balance sheet-income statement, liquidity ratio-efficiency ratio, IRR-MIRR.
ILO8022.3	Students will be able to compute future value-present value of money flow, return from single and two securities with risk, financial ratios, IRR, EOQ, dividend using various theories.
ILO8022.4	Students will be able to examine risk associated with portfolio, financial performance from balance sheet, financial position from income statement, capital budgeting decisions, working capital requirement, dividend policy decisions.
ILO8022.5	Students will be able to prepare trading account, balance sheet, cash flow account, P&L account, optimal capital structure.
ILO8022.6	Students will be able to justify investment decision, financing decision, dividend decision, capital budgeting decision, dividend decision.

Course Name:	Entrepreneurship Development and Management
Course Code	ILO8023
Faculty Name:	Punit D'souza

Year	4	Sem	8

CO Number	Course Outcome
ILO8023.1	To understand and define management, business and entrepreneurship
ILO8023.2	To identify the elements in the macro and micro business environment
ILO8023.3	To relate tools with the preparation of business plans and new product development

Course Name:	Environmental Management
Course Code	ILO8029
Faculty Name:	Kartiki Bhave, Anice Mathew, Dr. Vinod Gokarna, Sameer Hadkar

Year	4	Sem	8

CO Number	Course Outcome
ILO8029.1	Develop an insight of Global crisis and Environmental concerns in India and will be able r to discuss the goal, significance ,characteristics of environment management principles .The student will be able to list different tools used in Environmental management The student will be able to explain the goals of sustainable development and highlight on triple bottom line approach required for corporate sustainability.
ILO8029.2	discuss the causes for and the consequences of the global environmental problems such as pollution, global warming, ozone depletion, acid rain, hazardous wastes,
ILO8029.3	recall the structure of the ecosystems and interactions of organisms with their environment for food, habitat and other resources and will be able to explain the ecosystem processes, limiting factors, carrying capacity.
ILO8029.4	understand the benefits of EM and explain the role & the functions of government for planning & regulating EM
ILO8029.5	discuss ISO 14000 EM system & identify its certification procedure and to understand how it helps organizations implement & improve their EM system.
ILO8029.6	explain the evolution of environment policies & laws and discuss the implication of international policies & laws for India