

Semester - I

22CDC12- Computer Aided Modelling and Design

		Program Outcomes												Program Specific Outcomes		
Course Outcomes		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Solve 2D and 3D transformations for the basic entities like line and circle.	1	2	3	-	3	-	1	-	1	-	-	2	2	3	-
2	Formulate the basic mathematics fundamental to CAD system.	3	2	-	2	3	-	-	-	1	-	-	2	3	2	-
3	Apply basic concepts to develop construction techniques and solid modelling concepts.	3	3	2	2	2	2	1	-	1	-	-	2	2	2	-
4	Use computer and CAD software for design and modelling.	1	2	2	2	2	-	1	1	1	-	-	2	2	2	-
5	Create geometric models through animation and transform them into real world systems	1	2	2	2	2	-	1	1	1	-	-	3	2	3	-
Average		1.8	2.2	2.2	2	2.4	2	1	1	1	-	-	2	2	2.4	-

Semester - I																
22CDC13- Advanced Mechanics of Materials																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Apply the concepts of the theory of elasticity to a three-dimensional stress system.	3	3	3	3	2	-	-	-	-	-	-	3	1	1	-
2	Determine the shear center of various cross-sections and deflections in beams subjected to unsymmetrical bending	3	3	3	3	2	-	-	-	-	-	-	3	1	1	-
3	Evaluate the stresses in flat plates and curved members.	3	3	3	3	2	-	-	-	-	-	-	3	1	1	-
4	Compute the torsional stress of non-circular sections.	3	3	3	3	2	-	-	-	-	-	-	3	1	1	-
5	Apply the concept of contact stresses in point and line contact applications and apply the concept of FEA in linear elasticity.	3	3	3	3	3	-	-	-	-	-	-	3	1	1	-
Average		3	3	3	3	2.2	-	-	-	-	-	-	3	1	1	-

Semester - I																
22MLC01- Research Methodology And IPR																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Understand research problem formulation	2	2	1	3	1	-	-	-	-	-	1	2	1	-	-
2	Analysis research related information	-	-	2	2	1	1	-	3	-	1	-	2	1	-	-
3	Follow research ethics	-	-	2	-	-	1	1	1	-	3	1	-	-	-	-
4	Understand that today's world is controlled by computer, Information technology, but tomorrow's world is ruled by ideas, concepts and creativity.	-	-	-	2	1	-	-	-	-	2	1	-	-	2	-
5	Understand that IPR production provides an incentive to inventors for further research work and investment in R& D, which leads to creation of new and better products, and in turn brings about economic growth and social benefits.	-	-	-	-	2	1	-	1	-	-	1	-	-	3	-
Average		2	2	1.7	2.3	1.2	1	1	1.7	-	2		2	1	2.5	-

Semester - I																
22CDC14- Cad Modelling and Drafting Laboratory																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
CO1	Use the modern engineering tools for engineering practice.	-	1	2	3	-	1	3	-	1	1	-	1	2	3	-
CO2	Draw 2D part drawings, sectional views, and assembly drawings as per standards.	-	2	3	3	-	2	3	-	2	1	-	2	1	3	-
CO3	Model the 3D mechanical components with dimensioning	-	2	3	3	-	2	3	-	2	2	-	3	2	-	-
CO4	Generate Assembly drawing of a given mechanical component using software assistance.	-	2	3	3	-	2	3	-	3	2	-	1	3	-	-
CO5	Convert 3D solid models into 2D drawings and prepare different views, sections, and dimensioning of part models.	-	2	3	3	-	2	3	-	3	2	-	2	1	-	-
Average		-	1.8	2.8	3	-	1.8	3	-	2.2	1.6	-	1.8	1.8	1.2	-

Semester - I																
22CDC15- Technical Seminar – I																
		Program Outcomes												Program Specific Outcomes		
Course Outcomes		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Generate motivation for any topic of interest and develop a thought process for technical presentation.	-	-	-	-	-	1	3	3	1	1	-	3	-	-	-
2	Express communicative skills (e.g. speaking, listening, reading, and/ or writing).	-	-	-	-	-	-	3	2	2	3	-	-	-	3	-
3	Make use of new and recent technology for creating technical reports	-	-	-	-	1	-	3	1	2	2	-	-	2	-	-
4	Organize a detailed literature survey and build a document with respect to technical publications.	-	-	-	-	-	-	3	3	3	2	-	2	-	-	-
5	Analyse and comprehend the proof-of-concept and related data.	-	1	-	3	-	-	3	-	3	2	-	-	-	2	-
Average		-	1	-	3	1	1	3	2.2	2.2	2	-	2.5	2	2.5	-

Semester - II																
22CDC210 Finite Element Methods in Design																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Understand the concept of finite element method for solving design problems.	3	1	3	1	-	-	-	1	1	-	-	1	2	-	-
2	Formulate and solve manually problems in 10D structural systems involving bars, trusses, beams and frames.	3	1	3	3	3	-	-	1	1	-	-	-	-	3	-
3	Develop 2-D FE formulations involving triangular, quadrilateral elements and higher order elements	3	1	3	3	2	-	-	1	1	-	-	-	-	-	-
4	Apply the knowledge of FEM for stress analysis, model analysis, heat transfer analysis and flow analysis	3	2	3	3	2	-	2	2	1	-	-	1	2	-	-
5	Apply the knowledge of FEM for heat transfer analysis and flow analysis	3	1	1	1	1	-	-	-	1	-	-	1	1	-	-
Average		3	1.2	2.6	2.2	2	-	2	1.2	1	-	-	1	1.7	3	-

Semester - II

22CDC22- Mechanical Vibrations and Acoustics

		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
Course Outcomes		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Understand the effects of vibration in mechanical systems and their classification.	3	1	1	1	1	-	-	-	-	-	1	-	-	1	-
2	Develop schematic models for physical systems and formulate governing equations of motion.	1	3	1	1	2	2	-	-	-	-	1	-	-	-	-
3	Determine a complete solution to mechanical vibration problems using mathematical or numerical techniques.	2	1	2	1	-	1	1	-	-	-	1	1	2	-	-
4	Identify the various vibration measuring instruments, vibration control and analysis techniques	1	3	2	1	1	-	-	-	-	-	1	-	-	-	-
5	Analysis noise and acoustics to control and reduce vibration effects in machinery.	1	1	2	1	1	-	-	-	-	-	-	1	1	-	-
Average		1.6	1.8	1.6	1	1.2	1.5	1	-	-	-	1	1	1.5	1	-

Semester - II																
22CDC23- Solid Freeform Manufacturing																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Recognize the importance in the evolution of SFM/AM, proliferation into the various fields and its effects on supply chain.	2	3	1	3	3	2	-	-	-	2	-	2	-	-	-
2	Evaluate the design for AM and its importance in the quality of fabricated parts.	3	2	3	3	3	2	1	2	-	-	-	3	3	-	-
3	Acquire knowledge on principles and applications of polymerization and sheet lamination processes with case studies.	3	3	2	3	1	3	1	-	-	-	-	-	-	-	-
4	Acquire knowledge on principles of material extrusion and powder bed fusion processes and design guidelines.	3	3	2	3	2	1	-	-	-	-	-	-	-	-	-
5	Perceive jetting and direct energy deposition processes and their applications.	3	3	2	3	1	1	-	-	-	2	-	3	-	1	-
Average		2.8	2.8	2	3	2	1.8	1	2	-	2	-	2.7	3	1	-

Semester - II																
22CDC24- Finite Element Analysis Laboratory																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Apply the concept of FEM for solving static structural problems.	1	2	1	3	-	2	-	-	1	-	-	1	2	1	-
2	Apply the concept of FEM for modal analysis.	3	1	2	1	-	2	-	-	2	1	-	1	2	3	-
3	Apply the FEM technology for Thermal stress analysis.	3	2	1	2	3	2	-	-	2	1	-	2	2	3	-
4	Apply the FEM technology for Fluid Flow Analysis.	3	1	1	1	3	2	-	-	2	2	-	3	2	1	-
5	Solve the coupled field analysis problems using FEA software.	3	1	1	1	3	2	-	-	2	2	-	3	2	1	-
Average		2.6	1.4	1.2	1.6	1.8	2	-	-	1.8	1.2	-	2	2	1.8	-

Semester - II																
22CDC25- Cam and Robotics Laboratory																
		Program Outcomes												Program Specific Outcomes		
Course Outcomes		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Identify the features and selection of CNC machines.	-	2	1	3	-	2	-	-	1	-	-	1	2	1	-
2	Apply the basic concepts in NC technology for turning and milling applications.	1	1	2	1	-	2	-	-	2	-	-	1	2	3	-
3	Make familiar with the use of CAE and CAM Software.	-	2	1	2	1	2	-	-	2	-	-	2	1	3	-
4	Practice in part programming and operating a machining centre.	-	1	1	1	1	2	-	-	2	-	-	3	2	1	-
5	Program and control robot path for industrial applications.	-	1	1	1	1	2	-	-	2	-	-	3	1	1	-
Average		1	1.4	1.2	1.6	1	2	-	-	1.8	-	-	2	1.6	1.8	-

Semester - II																
22CDC26- Technical Seminar -II																
		Program Outcomes												Program Specific Outcomes		
Course Outcomes		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Generate motivation for any topic of interest and develop a thought process for technical presentation.	-	-	-	-	-	1	3	3	1	1	-	3	-	-	-
2	Express communicative skills (e.g. speaking, listening, reading, and/ or writing).	-	-	-	-	-	-	3	2	2	3	-	-	-	3	-
3	Make use of new and recent technology for creating technical reports	-	-	-	-	1	-	3	1	2	2	-	-	2	-	-
4	Organize a detailed literature survey and build a document with respect to technical publications.	-	-	-	-	-	-	3	3	3	2	-	2	-	-	-
5	Analyse and comprehend the proof-of-concept and related data.	-	1	-	3	-	-	3	-	3	2	-	-	-	2	-
Average		-	1	-	3	1	1	3	2.2	2.2	2	-	2.5	4	1	-

Semester - III																
22THE510- Design Of Solar and Wind Systems																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Describe solar fundamentals, collectors and classify them.	3	2	2	-	2	1	-	-	-	-	-	-	3	1	-
2	Describe the principle and design the solar heating, cooling and other solar applications.	3	1	3	-	2	-	-	-	-	-	-	-	3	2	-
3	Explain the principle, working, design optimization of PV system for different applications.	3	-	2	2	2	-	-	-	-	-	-	-	3	2	2
4	Describe the basics and measurements of wind energy.	3	-	3	-	2	-	-	-	-	-	-	-	3	2	-
5	Explain the aerodynamic constructional details of wind turbine.	3	-	3	2	2	2	-	-	-	-	2	-	3	2	-
Average		3	1.5	2.6	2	2	1.5	-	-	-	-	2	-	3	1.8	2

Semester - III

22THE52- Design And Analysis of Turbo Machines

		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
Course Outcomes		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Analyse the energy transfer process in thermodynamic systems.	3	2	2	-	-	2	-	-	-	-	-	-	2	2	-
2	Calculate the performance of centrifugal flow and axial flow combustion systems.	3	-	3	2	-	2	-	-	-	-	-	-	2	2	-
3	Design and analyze the combustion chamber for turbomachines.	3	2	3	2	-	2	-	-	-	-	-	-	2	2	-
4	Compute and analyze the performance of axial and radial flow turbines.	3	2	3	2	-	2	-	-	-	-	-	-	2	2	-
5	Predict the performance of gas turbines and thermodynamic energy systems.	3	2	3	2	-	2	-	-	-	-	-	-	2	2	-
Average		3	2	2.8	2	-	2	-	-	-	-	-	-	2	2	-

Semester - III																
18MTE14- Fire Engineering and Explosion Control																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Describe the fundamentals of fire, explosion and theory of combustion.	2	-	-	2	-	-	-	-	-	2	2	-	2	-	-
2	Classify the fire, class of fire and equipment for fire extinguishing.	2	-	-	2	-	-	-	-	-	2	2	-	2	-	-
3	Explain various industrial fire protection systems components and their working.	2	-	-	2	-	1	-	-	1	1	1	-	2	-	-
4	Design the building with fire protection and concepts of their design.	2	-	-	2	-	1	-	-	1	1	1	-	2	-	-
5	Describe the explosion protection system for various application.	2	-	-	2	-	1	-	-	1	1	1	-	2	-	-
Average		2	-	-	2	-	1	-	-	1	1.4	1.4	-	2	-	-

Semester - III																
22THE54 - Waste To Energy																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Understand the various types of wastes from which energy can be generated.	3	-	-	2	-	2	-	-	-	-	-	-	2	2	-
2	Gain knowledge on biomass pyrolysis process and its applications.	3	-	-	3	3	2	-	-	-	2	-	-	2	2	-
3	Develop knowledge on various types of biomass gasifiers and their operations.	3	3	3	2	-	2	-	-	-	-	-	-	2	2	-
4	Gain knowledge on biomass combustors and its applications on generating energy.	3	3	3	2	-	2	-	-	-	-	-	-	2	2	-
5	Understand the principles of bio-energy systems and their features.	3	-	3	-	-	2	-	-	-	-	-	-	2	2	2
Average		3	3	3	2.2	3	2	-	-	-	2	-	-	2	2	2

Semester - III																
22THE55- Solar Refrigeration And Air-Conditioning																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Explain the concept of Carnot cycle, thermodynamic process and environmental effects.	3	-	1	-	-	-	2	-	-	-	-	-	2	2	-
2	Classify and explain solar cooling and hybrid air conditioning system.	3	2	-	-	-	1	1	-	-	-	-	-	-	-	2
3	Articulate the technical fundamentals of solar thermal energy storage and heating systems.	3	2	-	1	-	1	-	-	-	-	-	-	3	3	-
4	Describe the spectrum of possible solar thermal applications for day-to-day life.	3	2	-	1	-	-	-	-	-	-	-	-	2	3	-
5	Communicate technological and socio-economic issues involved in solar energy.	3	2	2	-	-	-	-	-	-	2	-	-	-	-	-
Average		3	2	1.5	1	-	1	1.5	-	-	2	-	-	2.3	2.7	2

Semester - III																
22THE61- Environmental And Pollution Control																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	To describe the background of present condition of the environment and remedial action required.	1	1	2	1	1	2	-	3	-	2	-	-	1	1	1
2	Elaborate the sources of air pollution and the equipment for control them.	1	1	2	1	1	2	-	3	-	2	-	-	1	1	1
3	Elaborate the sources of water pollution and the equipment for control them.	1	1	2	1	1	2	-	3	-	2	-	-	1	1	1
4	Elaborate the sources of solid waste, their characteristics and managements.	1	1	2	1	1	2	-	3	-	2	-	-	1	1	1
5	Describe the other sources of pollution from the industries and their controlling techniques.	1	1	2	1	1	2	-	3	-	2	-	-	1	1	1
Average		1	1	2	1	1	2	-	3	-	2	-	-	1	1	1

Semester - III																
22THE62- Nanotechnology																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Design the different types of solar collectors for a given cooling load.	3	3	3	3	1	2	2	-	-	-	1	-	3	2	-
2	Delineate systems for solar water heating.	3	3	3	3	1	2	2	-	-	-	1	-	3	2	-
3	Describe the principles and working of absorption cooling system.	3	3	3	3	1	2	2	-	-	-	1	-	3	2	-
4	Design the solar powered vapour compression refrigeration system.	3	3	2	2	1	3	2	-	-	1	1	-	3	2	-
5	Describe the various techniques for the implementation of solar energy in refrigeration and air conditioning system.	3	3	-	-	1	1	-	-	-	1	-	-	3	2	-
Average		3	3	2.7	2.7	1	2	2	-	-	1	1	-	3	2	-

Semester-III

22THE63- Solar Energy for Industrial Process Heating

		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
Course Outcomes		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Design the different types of solar collectors for a given cooling load.	3	3	3	3	1	2	2	-	-	-	1	-	3	2	-
2	Delineate systems for solar water heating.	3	3	3	3	1	2	2	-	-	-	1	-	3	2	-
3	Describe the principles and working of absorption cooling system.	3	3	3	3	1	2	2	-	-	-	1	-	3	2	-
4	Design the solar powered vapour compression refrigeration system.	3	3	2	2	1	3	2	-	-	1	1	-	3	2	-
5	Describe the various techniques for the implementation of solar energy in refrigeration and air conditioning system.	3	3	-	-	1	1	-	-	-	1	-	-	3	2	-
Average		3	3	2.7	2.7	1	2	2	-	-	1	1	-	3	2	-

Semester-III																
22THE64- Energy Efficient Buildings Design																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Will be familiar with climate responsive building design and basic concepts.	3	3	1	1	2	2	1	2	1	-	-	-	3	-	-
2	Will Know the basic terminologies related to buildings.	3	3	3	1	1	-	-	-	-	1	1	-	3	-	-
3	Will Know the passive (air) conditioning techniques.	3	1	3	-	1	2	-	1	-	2	2	-	3	-	3
4	Will be able to evaluate the performance of buildings.	3	3	3	2	2	2	-	-	-	2	2	-	2	-	2
5	Gets acquainted with Renewable energy systems in buildings.	3	2	3	-	3	1	-	2	-	2	2	-	2	-	2
Average		3	2.4	2.6	1.3	1.8	1.7	1	1.7	1	1.7	1.7	-	2.6	-	2.3

Semester-III																
22THE65- Analysis Of Thermal Power Cycles																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Understand the number system and the functioning of logic gates with various logic families.	3	2	2	2	3	2	3	2	-	-	-	-	2	1	-
2	Design and analyse combinational logic circuits and Logic gates.	3	3	2	2	3	3	2	1	1	-	-	-	3	2	-
3	Design the sequential logic circuits using Flip flops	2	2	3	3	2	1	2	1	1	-	-	-	2	2	-
4	Design and analyse asynchronous sequential logic circuits	2	1	2	1	2	2	3	1	-	-	-	-	2	1	-
5	Understand the concepts of memories and PLDs and implementation of circuits using memory and PLDs.	2	1	2	1	3	2	1	2	-	-	-	-	3	2	-
Average		2.4	1.8	2.2	1.8	2.6	2	2.2	1.4	1	-	-	-	2.4	1.6	-

Semester-III																
22THE71- Energy Forecasting, Modelling and Project Management																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Have knowledge in the National energy scenario.	-	1	2	1	1	1	1	1	-	3	3	-	-	1	-
2	Do Energy prediction using various forecasting techniques.	-	2	3	3	3	2	-	-	-	2	2	-	1	3	2
3	Develop optimization model for energy planning.	-	3	3	3	3	-	2	-	-	1	1	-	-	-	2
4	Capable of writing project proposals.	-	1	1	2	-	2	2	2	-	2	2	-	-	-	2
5	Understand the National and state energy policies.	-	1	-	-	-	2	2	2	-	2	2	-	-	1	1
Average		-	1.6	2.2	2.2	2.3	1.7	1.7	1.7	-	2	2	-	1	1.7	1.7

Semester-III																
22THE72- Energy Management and Environmental Benefits																
		Program Outcomes												Program Specific Outcomes		
Course Outcomes		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Recognize the importance of energy conservation and suggest measures for improving per capita energy consumption.	3	-	-	-	-	-	-	-	-	1	1	-	-	2	2
2	Analyses the energy sharing and cost sharing pattern of fuels used in industries.	3	2	2	2	1	1	-	-	2	2	2	-	-	2	-
3	Apply Gantt Chart, CPM and PERT in energy conservation projects.	2	1	1	1	2	-	1	2	3	-	-	-	-	2	3
4	Evaluate the techno-economics of a project adopting discounting and non- discounting cash flow techniques.	2	1	-	1	1	-	1	1	3	2	2	-	-	-	2
5	Assess the sources of additional revenue generation for energy conservation projects adopting UNFCC.	2	-	-	-	-	2	1	-	2	1	1	-	-	-	-
Average		2.4	1.3	1.5	1.3	1.3	1.5	1	1.5	2.5	1.5	1.5	-	-	2	2.3

Semester-III																
22THE73- Solar Energy Appliances																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Diagnose the fundamental concepts about solar energy systems and devices.	2	-	1	-	2	1	-	-	-	-	-	-	2	2	2
2	Will be familiar with concepts of solar home lighting and solar street lighting systems.	2	2	3	3	-	-	-	-	-	-	2	-	2	2	-
3	Identify the solar cooker technologies for suitable applications.	2	2	3	2	-	-	-	-	-	-	2	-	2	2	-
4	Recognize the applications and types of solar dryers.	2	2	3	2	-	-	-	-	-	-	2	-	2	2	-
5	Aware about various desalination techniques and material problems in solar still.	2	-	2	2	-	-	-	-	-	-	-	-	2	2	-
Average		2	2	2.4	2.2	2	1	-	-	-	-	2	-	2	2	2

Semester-III																
22THE74- Cost Management of Engineering Projects																
		Program Outcomes												Program Specific Outcomes		
Course Outcomes		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Understand the costing concepts and their role in decision making.	-	2	-	-	3	2	-	-	1	-	-	-	-	-	2
2	Understand the project management concepts and their various aspects in selection.	-	-	-	-	-	-	-	-	3	-	3	-	-	-	2
3	Interpret costing concepts with project execution.	-	2	-	-	2	-	-	-	3	-	3	-	-	-	2
4	Gain knowledge of costing techniques in service sector and various budgetary control techniques.	-	2	-	-	-	-	-	-	2	-	2	-	-	-	2
5.	Become familiar with quantitative techniques in cost management.	-	2	-	-	3	-	-	-	2	-	2	-	-	-	2
Average		-	2	-	-	2.7	2	-	-	2.2	-	2.5	-	-	-	2

Semester-III																
22THE75- Advanced Composite Materials																
Course Outcomes		Program Outcomes												Program Specific Outcomes		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1	Choose and select the suitable composite material and their reinforcements.	1	2	1	3	1	-	-	-	2	-	1	-	-	-	-
2	Select constituent materials glass, carbon, aramid, ceramic fibres and resins.	1	1	1	2	2	1	-	-	-	-	1	-	-	-	1
3	Understand & Apply engineering mechanics, analysis and design, macro and micro mechanics of composites.	2	2	1	1	2	2	3	-	-	2	1	-	1	-	-
4	Highlight the appropriate use of composite structures in the industry.	1	1	1	1	2	-	-	-	1	-	1	-	-	1	-
5	Describe the concepts of nano composite and their characteristics.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Average		1.2	1.5	1	1.7	1.7	1.5	3	-	1.5	2	1	-	1	1	1