



Course Outcomes

Department of B. Tech. First Year		
Course : Engineering Mathematics -II		Course Code: SMAT201T SAR Code: C121
Class: B. Tech. Second sem		Session : 2024-25
Students will able to		BT Level
CO1	Analyze probability distribution, probability density function. Compute expected value and moment generating function of various random variables and classify different probability distribution.	L3
CO2	Determine the correlation between two variables, form regression lines and fitting of a Cartesian and exponential curve using Least Square method.	L3
CO3	Identify, analyze and solve Statistical problems. Determine multiple correlation coefficients, regression equation of three variables, measures of central tendency and Skewness.	L3
CO4	Apply the fundamentals of Sampling techniques to engineering problems, testing the hypothesis using various mathematical tools.	L3


Name and Sign of Subject In charge

Dr. (Mrs.) S. R. Suple



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Course Outcomes

Department of B. Tech. First Year		
Course : Engineering Mathematics-II		Course Code: CMAT201T SAR Code: C121
Class: B. Tech. Second sem		Session : 2024-25
Students will able to		BT Level
CO1	Determine the correlation between two variables, form regression lines and fitting of a Cartesian and exponential curve using Least Square method.	L3
CO2	Apply the concept of E and delta operator to find factorial polynomials. Determine the missing term using Lagrange's interpolation formula for unequal interval of argument and the value of integral using Simpson's 1/3rd, Simpson's 3/8th and trapezoidal rule	L3
CO3	Evaluate the double integrals , triple integrals of Cartesian co-ordinates and Polar co-ordinates and apply it to find area, volume of given region	L4
CO4	Apply the basic concept of partial derivatives to find Gradient, Divergence, Curl, Directional derivatives as well as apply the concept of Line integrals in various engineering problems.	L3

Name and Sign of Subject In charge

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Course Outcomes

Department of B. Tech. First Year		BT Level
Course : Material Physics		Course Code: PH203T
Class: B. Tech. Second Sem		Session : 2024-25
Students will able to		
C01	Apply the principles of crystallography to analyze the internal structure of crystalline solids and calculate fundamental parameters like lattice constants, packing fractions, and Miller indices	L3
C02	Apply the Energy Band Theory of solids to classify materials and describe the formation of p-n junction and its importance in behavior of the various diode under Forward Bias and Reverse Bias mode.	L2, L3
C03	Classify magnetic materials based on their susceptibility and permeability and can apply these concepts of magnetics material to its application.	L2, L3
C04	Evaluate various 'Top-down' and 'Bottom-up' synthesis techniques and analyze the impact of nanoscience and nanotechnology on society.	L2

Name and Sign of Subject Incharge

Dr. U. V. Chakraborty



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Course Outcomes

Department of B. Tech. First Year		
Course : Energy and Environment		Course Code: CH202T
Class: B. Tech. Second Sem		Session : 2024-25
Students will able to		
CO		BT
CO1	<i>Explain</i> basic energy concepts, solid fuels, and calculate calorific values for industrial applications	2 , 5
CO2	<i>Explain</i> petroleum refining processes, <i>analyze</i> engine knocking (IC and CI engine) and fuel ratings, and <i>discuss</i> binding energy and fuel cells with applications	2 , 4
CO3	<i>Analyze</i> the impact of industrial pollution and <i>implement</i> green chemistry approaches for its control.	4
CO4	<i>Explain</i> the classification, structure, and properties of advanced materials in sustainable development.	2

Signature of Subject Incharge

Dr. A-C. Halder

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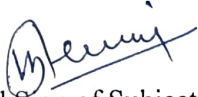
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Course Outcomes

Department of B. Tech. First Year			
Course : Indian Knowledge System		Course Code: HU208T	SAR Code: C124
Class: B. Tech. Second sem		Session: 2024-25	
Students will able to			BT Level
CO1	Interpret basic knowledge of Indian Knowledge System.		L2
CO2	Summarizes the teaching of Indian culture and civilization to the present day.		L2
CO3	Analyze Indian architectural System.		L3
CO4	Identify the methods of physical and mental wellbeing		L2


Name and Sign of Subject In charge
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Course Outcomes

Department of B. Tech. First Year		
Course : Programming For Problem Solving		Course Code: CSE204T SAR Code: C125
Class: B. Tech. Second sem		Session: 2024-25
Students will able to		BT Level
CO1	Design Algorithms, Flowchart for problems solving.	L3
CO2	Acquire ability to apply different control statements,	L2
CO3	Apply the knowledge to achieve code re-usability with functions and pointers.	L3

Name and Sign of Subject In charge

(Mrs. P. L. Katoore)



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Course Outcomes

Department of B. Tech. First Year		
Course : Linux Fundamentals	Course Code: CSE206T	SAR Code:C126
Class: B. Tech. Second sem		Session: 2024-25
Students will able to		BT Level
CO1	Describe the basics of different types of Operating Systems.	L2
CO2	Apply basic Linux commands and write shell scripts in the Linux operating system.	L3
CO3	Perform the storage management and failure recovery through commands.	L3

Name and Sign of Subject In charge

(Mrs. S.S. Dhande)



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Course Outcomes

Department of B. Tech. First Year			
Course : Linux Fundamentals		Code:IT206T	SAR Code: C127
Class: B. Tech. Second sem		Session: 2024-25	
Students will able to		BT Level	
CO1	Describe the basics of different types of Operating Systems.	L2	
CO2	Apply basic Linux commands and write shell scripts in the Linux operating system.	L3	
CO3	Perform the storage management and failure recovery through commands.	L3	

B.S. Dhande
Name and Sign of Subject In charge
(Mrs. B.S. Dhande)



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Course Outcomes

Department of B. Tech. First Year			
Course : Applied Electronics		Code: EC206T	SAR Code: C128
Class: B. Tech. Second sem		Session : 2024-25	
Students will able to			
C01	Discuss concept of semiconductor material.		L2
C02	Describe the working of PN junction diode and BJT.		L2
C03	Explain working electronics circuits using diode and transistors.		L2
C04	Discuss the types of number system and its conversion.		L2

Name and Sign of Subject In charge

(Sapana A. Bhande)

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Course Outcomes

Department of B. Tech. First Year		
Course : Advance in Mechanical System & Design		Course Code: ME206T SAR Code:C129
Class: B. Tech. Second sem		Session: 2024-25
Students will able to		BT Level
CO1	Illustrate the basics of CAD and its recent technologies	L2
CO2	Describe product design and development & to acquire its process for innovative product design and development	L2
CO3	Discuss tools and techniques of quality management in manufacturing industries.	L2
CO4	Describe Robot Anatomy and automation.	L2


Name and Sign of Subject In charge

Dr. S. P. Curnoay



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Course Outcomes

Department of B. Tech. First Year		
Course : Building Construction		Course Code: CE206T SAR Code: C130
Class: B. Tech. Second sem		Session: 2024-25
Students will able to		BT Level
CO1	Identify and Explain the properties of ingredient of concrete.	L3
CO2	Explain the properties of concrete which are required on construction field.	L3
CO3	Select suitable brick and stone for a particular application and choose the suitable type of construction method as per their applications on actual site.	L3

Name and Sign of Subject In charge

Dr - A - M - Sorte



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Practical Course Outcomes

Department of B. Tech. First Year		
Course : Engineering Mathematics-II Lab		Code: SMAT201P SAR Code: C131
Class: B. Tech. Second sem		Session: 2024-25
Students will able to		BT Level
CO1	Build an ability to use SAGEMATH coding for evaluating probability of an event ,Mathematical expectation, variance, standard deviation etc.	L3
CO2	Apply SAGEMATH coding for fitting of a Cartesian and exponential curve using Least Square method as well as to obtain the correlation between two variables.	L3
CO3	Apply SAGEMATH coding to obtain different measures of central tendency as well as multiple correlation of mathematical model etc	L3
CO4	Build an ability to apply computer Knowledge such as SAGEMATH coding to determine graphs of null and alternate hypothesis as well as t-test , chi square test for hypothesis testing.	L3

Name and Sign of Subject In charge

Dr. (Mrs.) S.R. Suple



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Practical Course Outcomes

Department of B. Tech. First Year		
Course : Engineering Mathematics-II Lab		Code: CMAT201P SAR Code: C131
Class: B. Tech. Second sem		Session : 2024-25
Students will able to		BT Level
CO1	Apply SAGEMATH coding for fitting of a Cartesian and exponential curve using Least Square method as well as to obtain the correlation between two variables.	L3
CO2	Build an ability to apply SAGEMATH coding to solve numerical integration using Trapezoidal, Simpson's 1/3 rd rule and Simpson's 3/8 th rule.	L3
CO3	Apply SAGEMATH coding to obtain the value of double integration, triple integration.	L3
CO4	Build an ability to apply computer knowledge such as SAGEMATH coding to determine different vector operations, directional derivatives etc.	L3

Name and Sign of Subject In charge

Dr. (Mrs.) S. R. Suple



Practical Course Outcomes

Department of B. Tech. First Year		BT Level
Course : Material Physics		Code: PH203P
Class: B. Tech. Second Sem		Session : 2024-25
Students will able to		
CO1	Analyze V-I characteristics of PN diode, Zener diode, and LED, and determine related parameters.	L4
CO2	Analyze input and output characteristics of PNP/NPN transistors in CB and CE modes, and calculate current gains (α and β).	L3
CO3	Construct Half-wave and Full-wave rectifier circuits and experimentally evaluate their performance by calculating rectification efficiency and ripple factor using an oscilloscope and multi-meter	L4
CO4	Operate precisely laboratory instruments, systematically analyze experimental data, construct graphical representations of V-I characteristics, and critically interpret results to validate scientific theories	L3, L4
CO5	Evaluate the performance of transistors, various diode and compare the V-I characteristics of all such electrical components.	L4

Name and Sign of Subject Incharge

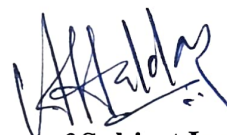
Dr. U. V. Gaidwad



Course Outcomes

Department of B.Tech First Year

Course : Energy and Environment		Subject Code: CH202P
Class: B. Tech. Second Semester		Session : 2024-25
Students will able to		
CO		BT
CO1	Calculate the dissolved oxygen concentration using titration and Analyze the effect of DO levels on aquatic life and water pollution	4
CO2	Evaluate the quality and suitability of coal for various uses based on proximate analysis results	5
CO3	Demonstrate proper handling of chemicals and safety practices during polymer synthesis.	2
CO4	Analyze the effect of carbon residue on fuel performance and engine efficiency.	4
CO5	Analyze the calorific value of a given solid fuel sample to analyse quality.	4


Signature of Subject Incharge
Dr. A.C. Haldar



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Course Outcomes

Department of B. Tech. First Year		
Course : Programming for Problem Solving Lab		Code: IT204P SAR Code:C134
Class: B. Tech. Second sem		Session: 2024-25
Students will able to		BT Level
CO1	Demonstrate the ability to write basic C programs using variables, data types, and arithmetic operations.	L2
CO2	Apply control structures such as conditionals and loops to solve simple to intermediate computational problems.	L3
CO3	Implement modular programming using functions, including recursive and non- recursive approaches.	L3
CO4	Manipulate data using arrays and perform operations such as sorting and traversal.	L3
CO5	Demonstrate the use of user-defined data structures to store and process structured data.	L3

Name and Sign of Subject In charge

(Mrs. P. L. Katore)



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Practical Course Outcomes

Department of B. Tech. First Year		
Course: Workshop Lab	Course Code: ME205P	SAR Code: C135
Class: B. Tech. Second sem	Session: 2024-25	
Students will able to		BT Level
C01	Describe workshop safety and plant layout principles for a secure and efficient environment.	L2
C02	Recognize and apply engineering materials effectively.	L2
C03	Recognize and apply measuring tools effectively.	L2
C04	Demonstrate practical skills in carpentry, fitting, welding, smithy and sheet metal work.	L3
C05	Develop problem solving abilities and teamwork skills in workshop setting.	L2

Name and Sign of Subject In charge

Mrs. Swapnil. J. Bhadani



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Practical Course Outcomes

Department of B. Tech. First Year		
Course: Fundamentals of Web designing Lab		Course Code: CES207P SAR Code: C136
Class: B. Tech. Second sem		Session : 2024-25
Students will able to		BT Level
CO1	Analyze the structure and model of the HTML programming language.	L2
CO2	Apply CSS defining styles for web pages	L3
CO3	Design website on internet using WordPress	L3
CO4	Create responsive websites that adjust seamlessly across different devices and screen sizes.	L3
CO5	Apply best practices for web design and development, ensuring usability and accessibility.	L3

S. S. Dhande

Name and Sign of Subject In charge

(Mrs. S. S. Dhande)



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Practical Course Outcomes

Department of B. Tech. First Year		
Course: Fundamentals of Web designing Lab	Code: IT207P	SAR Code:C137
Class: B. Tech. Second sem		Session: 2024-25
Students will able to		BT Level
CO1	Analyze the structure and model of the HTML programming language.	L2
CO2	Apply CSS defining styles for web pages	L3
CO3	Design website on internet using WordPress	L3
CO4	Create responsive websites that adjust seamlessly across different devices and screen sizes.	L3
CO5	Apply best practices for web design and development, ensuring usability and accessibility.	L3

S. S. Dhande


Name and Sign of Subject In charge

(Mrs. S. S. Dhande)



Practical Course Outcomes

Department of B. Tech. First Year		
Course: Electronics Workshop Lab	Code: EC207P	SAR Code: C138
Class: B. Tech. Second sem		Session: 2024-25
Students will able to		BT Level
C01	Apply knowledge to verify V-I characteristics of diodes and transistors	L3
C02	Verify the truth tables of basic logic gates	L2
C03	Apply knowledge to design basic electronics circuits using breadboard, simulation/ PCB design	L3
C04	Explain the working principles of rectifiers, voltage regulators and logic gates	L2
C05	Interpret the operation of transistor -based switches, amplifiers, & Mini projects	L2


Name and Sign of Subject In charge

Sapana A. Bhande



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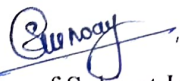
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Practical Course Outcomes

Department of B. Tech. First Year		
Course : Advances in Mechanical System & Design Lab Code: ME207P SAR Code: C139		
Class: B. Tech. Second sem		Session : 2024-25
Students will able to		BT Level
CO1	Illustrate CAD basics and essential commands and functions of CAD Software and to solve 2-dimensional transformation problems.	L2
CO2	Gain knowledge of Emerging trends of AI-ML in Design.	L2
CO3	Discuss Product design development & way to acquire its process for innovative product design development	L2
CO4	Develop the knowledge of New Management tools for Industries	L2


Name and Sign of Subject In charge
Dr. S. P. Gunway



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Practical Course Outcomes

Department of B. Tech. First Year		
Course : Construction Practices-II Lab		Code: CE207P SAR Code: C140
Class: B. Tech. Second sem		Session : 2024-25
	Students will able to	BT Level
CO1	Compute area of field and determine elevations.	L3
CO2	Test the quality of bricks.	L3
CO3	Prepare concrete by volume batching, find workability and strength of concrete	L3
CO4	Execute various brick masonry bonds.	L3
CO5	Execute building layout on field.	L3

Name and Sign of Subject In charge

Dr. A. M. Sorte



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Practical Course Outcomes

Department of B. Tech. First Year		
Course: Liberal Learning Lab (Holistic Yoga)		Course Code: LL209P SAR Code: C141
Class: B. Tech. Second sem		Session : 2024-25
	Students will able to	BT Level
C01	Know what it takes to experience complete Health at any given point.	L1
C02	Understand importance of the Emotional status of an individual in development of any disease as well as in the process of recovery.	L2
C03	Apply the knowledge gathered during the course for their well-being.	L3

Name and Sign of Subject In charge
(Dr. (Mrs.) S. R. Suple)