ACADEMIC YEAR 2020-21

BSH COURSE OUTCOMES

COURSE NAME	COURSE CODE	CO NO.	COURSE OUTCOME
ENGINEERING MATHEMATICS - I	BTBS101	1	Apply the matrix technique (Linear algebra) to find solutions of system of linear equations arising in many engineering problem
		2	Demonstrate the concept partial derivatives and their applications to Maxima/ Minima , series expansion of multi valued functions.
		3	Compute Jacobian of functions of several variables and their applications to engineering problems
		4	Identify and sketch of curves in various coordinate system.
		5	Evaluate multiple integrals and their applications to area and volume.
ENGINEERING PHYSICS	BTBS102/ 202	1	Explain & apply the concept of types of Oscillation,Dielectric properties & ultrsonics
		2	Explain & compare between Interference & Polarisation of light ,working Principle of Lasers & Fiber optics
		3	Interprete,apply &demonstrate principle of motion of charged particles in EF&MF,BAinbridge Mass spectrograph &G M counter
		4	Identify Types of crystals & crystal planes using Miller indices,Experemental apprroach.
ENGINEERING GRAPHICS	BTES103/ 203	1	Use of drawing instruments effectively for drawing and dimensioning
		2	Explain conventions and methods of engineering drawing
		3	Apply concept of projections of points, lines, planes, solids and section of solids.
		4	Construct isometric and orthographic views of given objects.
COMMUNICATION SKILL	BTHM104 /204	1	Apply speaking and writing skills in professional as well as social situations
		2	Overcome Mother Tongue Influence and demonstrate neutral accent while exercising English
		3	Apply communication skills for Presentations, Group Discussion and interpersonal interactions.
		4	Apply grammar correctly during Speaking and Writing situations especially in context with Presentations, Public Speaking, Report writing and Business Correspondence
Energy and Environment Engineering	BTES105/ 205	1	Identify conventional ,non conventional energy sources
		2	Know and discuss power consuming and power developing devices for effective utilization and power consumption
		3	Identify various sources of air, water pollution and its effects
		4	Know and discuss noise,soil, thermal pollution and Identify solid, biomedical and hazardous waste.
Basic Civil and Mechanical Engineering	BTES106/ 206	1	Identify various Civil Engineering materials and choose suitable material among various options
		2	Apply principles of surveying to solve engineering problem
		3	Identify various Civil Engineering structural components and select appropriate structural system among various options
		4	Explain and define various properties of basic thermodynamics, materials and manufacturing processes
		5	Know and discuss the working principle of various power consuming and power developing devices

Engineering Mathematics – II	BTBS201	1	Discuss the need and use of complex variables to find roots ,to separate complex quantities and to establish relation between circular and hyperbolic functions.
		2	Solve first and higher order differential equations and apply them as a mathematical modeling in electric and mechanical systems
		3	Determine Fourier series representation of periodic functions over different intervals.
		4	Demonstrate the concept of vector differentiation and interpret the physical and geometrical meaning of gradient, divergence &curl in various engineering streams.
		5	Apply the principles of vector integration to transform line integral to surface integral ,surface to volume integral &vice versa using Green‟s , Stoke‟s and Gauss divergence theorems.
Engineering Chemistry	BTBS102/ 202	1	Demonstrate knowledge of chemistry in technical fields.
		2	Bring adaptability to new developments in Engineering Chemistry and to acquire the skills required to become a perfect engineer
		3	Develop the importance of water in industrial and domestic usage.
		4	Identify the concepts of Chemistry to lay the ground work for subsequent studies in various engineering fields.
		5	Examine a fuel and suggest alternative fuels
Engineering Mechanics	BTES103/ 203	1	Apply fundamental Laws of Engineering Mechanics
		2	Apply Conditions of static equilibrium to analyze given force system
		3	Compute Centre of gravity and Moment of Inertia of plane surfaces
		4	Compute the motion characteristics of a body/particle for a Rectilinear and Curvilinear Motion
		5	Know and discuss relation between force and motion characteristics
Computer Programming in C	BTES104/ 204	1	Gain a broad perspective about the uses of computers in engineering industry and C Programming.
		2	Develop the basic concept of algorithm, algorithmic thinking and flowchart.
		3	Apply the use of C programming language to implement various algorithms and develops the basic concepts and terminology of programming in general.
		4	Use the more advanced features of the C language.
		5	Identify tasks in which the numerical techniques learned are applicable and apply them to write programs and hence use computers effectively to solve the task.
Basic Electrical and Electronics Engineering	BTES106/ 206	1	Apply basic ideas and principles of electrical engineering
		2	Identify protection equipment and energy storage devices.
		3	Differentiate electrical and electronics domains and explain the operation of diodes and transistors.
		4	Acquire knowledge of digital electronics
		5	Design simple combinational and sequential logic circuits.