H.K.E. Society's Sir M. Visvesvaraya College of Engineering

UG Course Outcomes for 2023-24 Courses	
Department of Computer Science and Engineering	
Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**I**
Course Name	**Mathematics – I for CSE Stream**
Course Code	**BMATS101**
Course Outcome #	**Course Outcome**
CO1	apply the knowledge of calculus to solve problems related to polar curves andlearn the notion of partial differentiation to compute rate of change of multivariate functions
CO2	analyze the solution of linear and nonlinear ordinary differential equations
CO3	get acquainted and to apply modular arithmetic to computer algorithms
CO4	make use of matrix theory for solving the system of linear equations and compute eigenvalues and eigenvectors
CO5	familiarize with modern mathematical tools namely MATHEMATICA/MATLAB/ PYTHON/ SCILAB
Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**I**
Course Name	**PHYSICS for CSE STREAM**
Course Code	**BPHYS102**
Course Outcome #	**Course Outcome**
CO1	Describe the principles of LASERS and Optical fibers and their relevant applications.
CO2	Discuss the basic principles of the Quantum Mechanics and its application in Quantum Computing
CO3	Summarize the essential properties of superconductors and its applications in qubits.
CO4	Illustrate the application of physics in design and data analysis.
CO5	Practice working in groups to conduct experiments in physics and perform precise and honest measurements.
Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**I**
Course Name	**Principles of Programming using C**
Course Code	**BPOPS103**
Course Outcome #	**Course Outcome**
CO1	Elucidate the basic architecture and functionalities of a computer and also recognize the hardware parts.
CO2	Apply programming constructs of C language to solve the real world problem
CO3	Explore user-defined data structures like arrays in implementing solutions to problems like searching and sorting
CO4	Explore user-defined data structures like structures, unions and pointers in implementing solutions
CO5	Design and Develop Solutions to problems using modular programming constructs using functions
Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**I**
Course Name	**Introduction to Electronics & Communication**
Course Code	**BESCK104C**
Course Outcome #	**Course Outcome**
CO1	Describe the concepts of electronic circuits encompassing power supplies, amplifiers and oscillators.
CO2	Present the basics of digital logic engineering including data representation, circuits and the microcontroller system with associated sensors and actuators
CO3	Discuss the characteristics and technological advances of embedded systems.
CO4	Relate to the fundamentals of communication engineering spanning from the frequency spectrum to the various circuits involved including antennas
CO5	Explain the different modes of communications from wired to wireless and the computing involved.

Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**I**
Course Name	**Introduction to Internet of Things (IOT)**
Course Code	**BETCK105H**
Course Outcome #	**Course Outcome**
CO1	Describe the evolution of IoT, IoT networking components, and addressing strategies in IoT.
CO2	Classify various sensing devices and actuator types.
CO3	Demonstrate the processing in IoT.
CO4	Explain Associated IOT Technologoes
CO5	Illustrate architecture of IOT Applications

Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**I**
Course Name	**Communicative English**
Course Code	**BENGK106**
Course Outcome #	**Course Outcome**
CO1	Understand and apply the Fundamentals of Communication Skills in their communication skills.
CO2	Identify the nuances of phonetics, intonation and enhance pronunciation skills.
CO3	To impart basic English grammar and essentials of language skills as per present requirement
CO4	Understand and use all types of English vocabulary and language proficiency.
CO5	Adopt the Techniques of Information Transfer through presentation.

Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**I**
Course Name	**INNOVATIVE & DESIGN THINKING**
Course Code	**BIDTK158**
Course Outcome #	**Course Outcome**
CO1	Appreciate various design process procedure
CO2	Generate and develop design ideas through different technique
CO3	Identify the significance of reverse Engineering to Understand products
CO4	Draw technical drawing for design ideas

Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**II**
Course Name	**Mathematics – II for CSE Stream**
Course Code	**BMATS201**
Course Outcome #	**Course Outcome**
CO1	Apply the concept of change of order of integration and variables to evaluate multiple integrals and their usage in computing area and volume.
CO2	Understand the applications of vector calculus refer to solenoidal, and irrotational vectors.Orthogonal curvilinear coordinates
CO3	Demonstrate the idea of Linear dependence and independence of sets in the vector space, and linear transformation
CO4	Apply the knowledge of numerical methods in analysing the discrete data and solving the physical and engineering problems.
CO5	Get familiarize with modern mathematical tools namely MATHEMATICA/ MATLAB /PYTHON/ SCILAB

Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**II**
Course Name	**CHEMISTRY FOR CSE STREAM**
Course Code	**BCHES202**
Course Outcome #	**Course Outcome**
CO1	Identitfy the terms & applications process involved in scientific and engineering.
CO2	Explain the phenomena of chemistry to describe the methods of engineering processes.
CO3	Solvetheproblemsinchemistrythatarepertinentinengineeringapplications
CO4	Applythebasicconceptsofchemistrytoexplainthechemicalpropertiesandprocesses
CO5	Analyze properties and multidi processes associated withchemical substances in sciplinary situations.

Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**II**
Course Name	**Computer Aided Engineering Drawing**
Course Code	**BCEDK103**
Course Outcome #	**Course Outcome**
CO1	Drawand communicate the objects with definite shape and dimensions
CO2	Recognize andDraw the shape and size of objects through different views
CO3	Develop the lateral surfaces of the object
CO4	Create a Drawing views using CAD software
CO5	Identify the interdisciplinary engineering components or systems through its graphical representation.

Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**II**
Course Name	**Introduction to Civil Engineering**
Course Code	**BESCK204A**
Course Outcome #	**Course Outcome**
CO1	Understand the various disciplines of civil engineering
CO2	Understand the infrastructure requirement for sustainable development
CO3	Compute the resultant and equilibrium of force systems.
CO4	Locate the centroid of plane and built-up sections
CO5	Compute the moment of inertia of plane and built-up sections.

Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**II**
Course Name	**Basics of JAVA programming**
Course Code	**BPLCK205C**
Course Outcome #	**Course Outcome**
CO1	To explain the features and object oriented concepts in JAVA programming
CO2	To analyse working of bitwise operators in JAVA
CO3	To develop simple programs based on polymorphism and inheritance
CO4	To describe the concepts of importing packages and exception handling mechanism

Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**II**
Course Name	**Indian Constitution**
Course Code	**BICOK107**
Course Outcome #	**Course Outcome**
CO1	Analyse the basic structure of Indian Constitution
CO2	Remember their Fundamental Rights, DPSP's and Fundamental Duties (FD's) of our constitution.
CO3	know about our Union Government, political structure & codes, procedures.
CO4	Understand our State Executive & Elections system of India.
CO5	Remember the Amendments and Emergency Provisions, other important provisions given by the constitution.

Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**II**
Course Name	**Scientific Foundations of Health**
Course Code	**BSFHK208**
Course Outcome #	**Course Outcome**
CO1	To understand and analyse about Health and wellness (and its Beliefs) & It's balance for positive mindset.
CO2	Develop the healthy lifestyles for good health for their better future.
CO3	Build a Healthy and caring relationships to meet the requirements of good/social/positive life.
CO4	To learn about Avoiding risks and harmful habits in their campus and outside the campus for their bright future.
CO5	Prevent and fight against harmful diseases for good health through positive mindset

Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**VII**
Course Name	**ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**
Course Code	**18CS71**
Course Outcome #	**Course Outcome**
CO1	Appaise the theory of Artificial intelligence and Machine Learning.
CO2	Illustrate the working of AI and ML Algorithms.
CO3	Demonstrate the applications of AI and ML.
Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**VII**
Course Name	**BIG DATA AND ANALYTICS**
Course Code	**18CS72**
Course Outcome #	**Course Outcome**
CO1	Understand fundamentals of Big Data analytics.
CO2	Investigate Hadoop framework and Hadoop Distributed File system.
CO3	Illustrate the concepts of NoSQL using MongoDB and Cassandra for Big Data.
CO4	Demonstrate the MapReduce programming model to process the big data along with Hadoop tools.
CO5	Use Machine Learning algorithms for real world big data.
CO6	Analyze web contents and Social Networks to provide analytics with relevant visualization tools
Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**VII**
Course Name	**USER INTERFACE DESIGN**
Course Code	**18CS734**
Course Outcome #	**Course Outcome**
CO1	Design the User Interface, design, menu creation, windows creation and connection between menus and windows
Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**VII**
Course Name	**CRYPTOGRAPHY**
Course Code	**18CS744**
Course Outcome #	**Course Outcome**
CO1	Define cryptography and its principles
CO2	Explain Cryptography algorithms
CO3	Illustrate Public and Private key cryptography
CO4	Explain Key management, distribution and ceritification
CO5	Explain authentication protocolls
CO6	Tell about IPSec
Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**VIII**
Course Name	**INTERNET OF THINGS**
Course Code	**18CS81**
Course Outcome #	**Course Outcome**
CO1	Interpret the impact and challenges posed by IoT networks leading to new architectural models.
CO2	Compare and contrast the deployment of smart objects and the technologies to connect them to NETWORKS
CO3	Appraise the role of IoT protocols for efficient network communication
CO4	Elaborate the need for Data Analytics and Security in IoT.
CO5	Illustrate different sensor technologies for sensing real world entities and identify the applications of IoT in Industry
Table 1: Course Outcomes	
Class	**COMPUTER SCIENCE AND ENGINEERING**
Semester	**VIII**
Course Name	**STORAGE AREA NETWORKS**
Course Code	**18CS822**
Course Outcome #	**Course Outcome**
CO1	Identify key challenges in managing information and analyze different storage networking technologies and virtualization
CO2	Explain components and the implementation of NAS
CO3	Describe CAS architecture and types of archives and forms of virtualization
CO4	Illustrate the storage infrastructure and management activities