DEPARTMENT OF COMPUTER SCIENCE ENGINEERING 2020-2021

COURSE OUTCOMES

YEAR / SEM: I / I   HS8151-TECHNICAL ENGLISH-1

No.	Course Outcomes
C101.1	Ability to speak/write clearly, confidently, comprehensively and communicate with one or many using appropriate communicative strategies.
C101.2	Ability to write cohesively and coherently avoiding grammatical errors, using a wide range of vocabulary and organizing the ideas logically on a given topic.
C101.3	Interpret different genres of texts adopting various reading strategies and to write comprehensively.
C101.4	Ability to listen/view and comprehend different spoken discourses/excerpts different accents and to write clearly in simple language.
C101.5	Demonstrate the role of a variety of technologies in communicating information elaborately on the ideas and opinions relevant in different situations .

YEAR / SEM: I / I MA8151-ENGINEERING MATHEMATICS – I

No.	Course Outcomes
C102.1	Ability to use both the limit definition and rules of differentiation to differentiate functions.
C102.2	Ability to summarize partial differentiation to solve maxima and minima problems.
C102.3	Ability to apply integration to calculate multiple integrals, area, volume, integrals in polar coordinates, in addition to change of order and change of variables.
C102.4	Ability to Evaluate integrals using techniques of integration, such as substitution, partial fractions and integration by parts.
C102.5	Ability to solve various techniques in solving differential equations of higher order

YEAR / SEM: I / I PH8151 -ENGINEERING PHYSICS-1

No.	Course Outcomes
C103.1	Ability to gain knowledge on the basics of properties of matter and its applications.
C103.2	Ability to summarize concepts of waves and optical devices and their applications in fiber optics.
C103.3	Ability to assess the concepts of thermal properties of materials and their applications in expansion joints and heat exchangers.
C103.4	Ability to generalize the advanced physics concepts of quantum theory and its applications in tunneling microscopes.
C103.5	Ability to schematize the basics of crystals, their structures and different crystal growth techniques.

YEAR / SEM: I / I CY8151-ENGINEERING CHEMISTRY-1

No.	Course Outcomes
C104.1	Ability to define the boiler feed water requirements, list out the related problems andlabel the water treatment techniques.
C104.2	Ability to analyze the basic concepts of phase rule and its applications for single and two component systems and to illustrate the purpose and significance of alloys
C104.3	Ability to summarize the preparation, properties and applications of engineeringmaterials
C104.4	Ability to classify the Types of fuels, investigate the calorific value calculations,manufacture of solid, liquid and gaseous fuels
C104.5	Ability to demonstrate the Principles and generation of energy in batteries, nuclearreactors, solar cells, wind mills and fuel cells

YEAR / SEM: I / I GE8151-PROBLEM SOLVING AND PYTHON PROGRAMMING

No.	Course Outcomes
C105.1	Identify algorithmic solutions to simple computational problems.
C105.2	Analyze the basics of python programming and to develop simple python programs
C105.3	Apply control, looping structures and functions to solve problems.
C105.4	Illustrate compound data using python lists, tuples, and dictionaries.
C105.5	Summarize various file operations and handling exceptions with sample file programs

YEAR / SEM: I / I GE8152-ENGINEERING GRAPHICS

No.	Course Outcomes
C106.1	Familiarize with the fundamentals and standards of Engineering graphics.
C106.2	Perform freehand sketching of basic geometrical constructions and multiple views of objects
C106.3	Project orthographic projections of lines and plane surfaces
C106.4	Draw projections and section of solids and development of surfaces.
C106.5	Design isometric and perspective sections of simple solids.

YEAR / SEM: I / I GE8161-PROBLEM SOLVING AND PYTHON PROGRAMMING LABORATORY

No.	Course Outcomes
C107.1	Experiment with simple Python programs.
C107.2	Implement Python programs with conditionals and loops.
C107.3	Develop Python programs step-wise by defining functions and calling them.
C107.4	Demonstrate the use Python lists, tuples, and dictionaries for representing compound data.
C107.5	Illustrate the concepts of read and write data from/to files in Python.

YEAR / SEM: I / I BS8161-PHYSICS AND CHEMISTRY LABORATORY

No.	Course Outcomes
C108.1	Ability to determine the wavelength of laser diode and particle size of given material using laser diode and also to determine the acceptance angle and numerical aperture of optical fiber.
C108.2	Ability to determine the wavelengths of prominent spectral lines of the mercury spectrum using grating.
C108.3	Ability to determine the water quality parameters through volumetric and instrumental analysis.
C108.4	Ability to determine dissolved oxygen level in the water sample
C108.5	Ability to determine the amount of chloride presents the water sample

YEAR / SEM: I / II HS8251-TECHNICAL ENGLISH

No.	Course Outcomes
C109.1	Ability to speak/write convincingly express opinions clearly, initiate discussions, negotiate, argue using appropriate communicative strategies.

C109.2	Write cohesively and coherently and flawlessly avoiding grammatical errors, using a wide vocabulary range, organizing their ideas logically on a topic.
C109.3	Interpret different genres of texts, infer implied meanings and evaluate it for ideas as well as for method of presentation.
C109.4	Ability to listen/view and comprehend different spoken excerpts critically and infer unspoken and implied meanings and write reports and winning job applications.
C109.5	Ability to identify, define and express the different components of grammar and Speak appropriately and effectively in varied formal and informal contexts.

YEAR / SEM: I / II MA8251-ENGINEERING MATHEMATICS – II

No.	Course Outcomes
C110.1	Ability to evaluate Eigen values and eigenvectors, diagonalization of a matrix, Symmetric matrices, Positive definite matrices and similar matrices
C110.2	Ability to solve Gradient, divergence and curl of a vector point function and related identities to apply concept of line, surface and volume integrals using Gauss, Stokes and Green's theorems and their verification
C110.3	Ability to discuss the Analytic functions, conformal mapping
C110.4	Ability to discuss complex integration and application of residue theorem
C110.5	Ability to explain the concepts of Laplace transform and inverse transform of simple functions, properties, various related theorems and application to differential equations with constant coefficients

YEAR / SEM: I / II PH8252-PHYSICS FOR INFORMATION SCIENCE

No.	Course Outcomes
C111.1	Ability to gain knowledge on the basics of properties of matter and its applications
C111.2	Ability to summarize concepts of waves and optical devices and their applications in fiber optics
C111.3	Ability to assess the concepts of thermal properties of materials and their applications in expansion joints and heat exchangers
C111.4	Ability to generalize the advanced physics concepts of quantum theory and its applicationsin tunneling microscopes
C111.5	Ability to schematize the basics of crystals, their structures and different crystal growth techniques

YEAR / SEM: I / II BE8255-BASIC ELECTRICAL AND ELECTRONICS AND MEASUREMENT ENGINEERING

No.	Course Outcomes
C112.1	Define various electric circuit laws, network reduction theorems.
C112.2	Summarize the working principle of electrical machines and transformers.
C112.3	Demonstrate the operation of renewable energy sources, lamps, batteries and protective devices.
C112.4	Illustrate the operations and characteristics of various electronic devices.
C112.5	Appraise types of errors present in measurements and explain the operating principles of different meters, transducers.

YEAR / SEM: I / II GE8291 ENVIRONMENTAL SCIENCE AND ENGINEERING

No.	Course Outcomes
C113.1	Ability to possess public awareness of environmental is at infant stage
C113.2	Ability to understand the problem posed by Environmental Pollution which cannot be solved by mere laws
C113.3	Ability to comprehend the natural resources available to us
C113.4	Ability to analyze and provide judgmental solutions to prevailing social issues in the environment
C113.5	Ability to develop and improve standard of living

YEAR / SEM: I / II CS 8251 PROGRAMMING IN C

No.	Course Outcomes
C114.1	Define the basic concepts and structure of C programming, various statements and compilation process.
C114.2	Design simple programs in C using arrays, strings, searching and sorting.
C114.3	Elaborate the concepts of functions, recursion, arrays, pointers and parameter passing with example programs.
C114.4	Apply the concepts of structures and pointers to develop applications in C and explain dynamic memory allocation.
C114.5	Summarize the various file handling operations including sequential and random file access and command line arguments.

YEAR / SEM: I / II GE8261-ENGINEERING PRACTICES LABORATORY

No.	Course Outcomes
C115.1	Experiment with carpentry and plumbing works to create pipeline connections for industrial and residential buildings
C115.2	Make use of shielded metal arc welding and gas welding to prepare butt joints, lap joints and T- joints
C115.3	Demonstrate basic Machining, Sheet Metal Work, Machine assembly, centrifugal pump, Air conditioner, operations of smithy, foundary and fittings
C115.4	Experiment with wiring and to measure electrical quantities, energies and resistance
C115.5	Elaborate on the study electrical components, logic gates and soldering practice

YEAR / SEM: I / II CS8261-C PROGRAMMING LABORATORY

No.	Course Outcomes
C116.1	Make use of basic constructs of C and decision-making constructs to design simple C programs
C116.2	Design C programs for simple applications using arrays and strings
C116.3	Develop C programs involving functions and recursion
C116.4	Experiment with the concepts of structures and pointers to write C programs
C116.5	Design C programs for file handling, sequential and random access of files

YEAR / SEM: II /III MA8351 DISCRETE MATHEMATICS

No.	Course Outcomes
C201.1	Infer the concepts needed to test the logic of a program
C201.2	Solve problems in mathematical induction, counting principles, permutation and combination, recurrence relations.
C201.3	Understand the graph theory concepts in computer science
C201.4	Summarize the concepts and properties of algebraic structures such as groups, rings and fields.
C201.5	Solve problems in lattices and Boolean algebra

YEAR / SEM: II / III CS 8351 DIGITAL PRIMCIPLES AND SYSTEM DESIGN

No	Course Outcomes
C202.1	Construct digital circuits and Simplify Boolean functions using K-map
C202.2	Understand and develop Combinational circuits with HDL description
C202.3	Inspect and create Synchronous Sequential circuits (Registers and Counters) with HDL description
C202.4	Analyse and Design Asynchronous Sequential circuits
C202.5	Propose designs using Memory and Programmable Logic Devices

YEAR / SEM: II / III CS8391 DATA STRUCTURES

No	Course Outcomes
C203.1	Demonstrate the concepts of ADT and Linear Data Structures-List
C203.2	Illustrate linear data structures-stacks and Queues and apply it for various applications
C203.3	Examine non- linear data structures-trees and apply it for solving problems
C203.4	Evaluate Graph Structures for Various applications
C203.5	Critically analyze and predict the solutions of various sorting algorithms ,hashing techniques

YEAR / SEM: II / III CS 8392 OBJECT ORIENTED PROGRAMMING

No	Course Outcomes
C204.1	Summarize the OOPS Concepts and Develop Java programs based on it.
C204.2	Develop Java programs using the concepts inheritance and interfaces
C204.3	Build Java applications using exceptions and I/O streams
C204.4	Design Java applications with threads and generics classes
C204.5	Develop interactive event driven applications in Java.

YEAR / SEM: II / III EC 8395 COMMUNICATION ENGINEERING

No	Course Outcomes
C205.1	Understand the principles of analog modulation techniques
C205.2	Illustrate the principles of pulse modulation techniques
C205.3	Apply digital modulation and transmission techniques.

| C205.4 | Interpret the principles behind information theory and coding |
| C205.5 | Assess the various digital communication techniques |

YEAR / SEM: II / III CS 8381 DATA STRUCTURES LABOURATORY

No	Course Outcomes
C206.1	Build functions to implement linear data structure operations
C206.2	Develop C programs to implement non-linear data structures
C206.3	Develop and Test C programs for implementing sorting and searching algorithms
C206.4	Apply appropriate hash functions that result in a collision free scenario for data storage and retrieval
C206.5	Identify and apply appropriate data structures for the given problem

YEAR / SEM: II / III CS8383 OBJECT ORIENTED PROGRAMMING LABOURATORY

No	Course Outcomes
C207.1	Develop and implement Java programs for simple applications that make use of classes, packages.
C207.2	Develop and implement Java programs to implement Inheritance,multi-threading and Interface concepts
C207.3	Develop and Test Java programs to implement applications with file processing
C207.4	Design Java programs to implement applications with generic programming and event handling.
C207.5	Create the real world applications by utilizing the concepts in Java.

YEAR / SEM: II / III CS 8382 DIGITAL SYSTEMS LABOURATORY

No	Course Outcomes
C208.1	Understand and Design simplified combinational circuits using logic gate
C208.2	Implement and Inspect simplified combinational circuits using MSI devices
C208.3	Evaluate and design various shift registers
C208.4	Inspect and Implement various counters
C208.5	Model and Examine combinational and sequential circuits using HDL

YEAR / SEM: II / IV HS 8381 INTERPERSONAL SKILLS/LISTENING &SPEAKING

No	Course Outcomes
C209.1	Improve your Listening Skills
C209.2	Take part in basic general and classroom conversation
C209.3	Be an active listener and discuss effectively in group
C209.4	Opinion your views ,participate confidently and appropriately
C209.5	Analysis both formal and informal conversations.

YEAR / SEM: II /IV MA 8402 PROBABILITY AND QUEUEING THEORY

No	Course Outcomes
C210.1	Relate the fundamental knowledge of the concepts of probability and have knowledge of standard distributions which can describe real life phenomenon.
C210.2	Understand the basic concepts of one and two dimensional random variables and illustrate in engineering applications.
C210.3	Apply the concept of random processes in engineering disciplines.
C210.4	Utilize skills for analyzing queuing models.
C210.5	Evaluate the concepts of advanced queuing models and characterize phenomenon which evolve with respect to time in a probabilistic manner

YEAR / SEM: II / IV CS 8491 COMPUTER ARCHITECUTURE

No	Course Outcomes
C211.1	Understand the basics structure of computers, operations and instructions.
C211.2	Utilize basic instruction set, Addressing modes of MIPS architecture and Design arithmetic and logic unit
C211.3	Compare and Contrast the non-pipelined and pipelined data path implementation of MIPS
C211.4	Inspect parallel processing architectures.
C211.5	Understand and Examine the various memory systems and I/O communication.

YEAR / SEM: II / IV CS 8492 DATA MANAGEMENT SYSTEMS

No	Course Outcomes
C212.1	Classify the modern and futuristic database applications based on size and complexity
C212.2	Demonstrate Relational model from ER model to perform database design effectively and optimize queries using normalization criteria.
C212.3	Examine the database transaction concepts
C212.4	Compare and contrast various indexing ,hashing strategies and also examine query optimization techniques
C212.5	Appraise how advanced databases differ from traditional databases

YEAR / SEM: II / IV CS8451 DESIGN AND ANALYSIS OF ALGORITHMS

No	Course Outcomes
C213.1	Understand the notion of algorithm, asymptotic notations and analyze algorithmic complexity.
C213.2	Apply brute force and divide and conquer methods for solving various applications and analyze its alternative solutions for the same problem.
C213.3	Inspect the time and space complexity of the algorithms designed using dynamic programming techniques and greedy techniques.
C213.4	Examine various iterative improvement techniques
C213.5	Identify the limitations of algorithm power and improve the efficiency of existing algorithms

YEAR / SEM: II / IV CS8493 OPERATING SYSTEMS

No	Course Outcomes
C214.1	Infer the basic concepts and functions of operating systems.
C214.2	Demonstrate process management with various Scheduling algorithms and deadlocks.
C214.3	Analyze various memory management schemes.
C214.4	Evaluate I/O management and File systems.
C214.5	Compare IoS and Andriod operating systems and test for administrative tasks on Linux servers.

YEAR / SEM: II / IV CS8494 SOFTWARE ENGINEERING

No	Course Outcomes
C215.1	Summarize the key activities in managing a software project and compare different process models.
C215.2	Understand the concepts of requirements engineering and Analysis Modeling.
C215.3	Apply systematic procedure for software design and deployment.
C215.4	Compare and contrast the various testing and maintenance measures
C215.5	Deduct project schedule, estimate project cost and effort required.

YEAR / SEM: II / IV CS8481 DATABASE MANAGEMENT SYSTEMS LABORATORY

No	Course Outcomes
C216.1	Show the use of typical data definitions and manipulation commands.
C216.2	Examine the implementation of nested and join queries.
C216.3	Understand and test for functions, procedures and procedural extensions of data bases.
C216.4	Inspect and implement applications that require front-end tools.
C216.5	Design and implement typical database applications using Tables, Views, Functions and Procedures.

YEAR / SEM: II / IV CS8461 OPERATING SYSTEMS LABORATORY

No	Course Outcomes
C217.1	Illustrate use of Linux commands, develop shell programs, implement system calls and simulate Linux commands
C217.2	Test for the implementation of processes and IPC
C217.3	Compare the performance of various CPU scheduling algorithms
C217.4	Design and Implement Semaphores Deadlock avoidance and Deadlock Detection Algorithm
C217.5	Appraise the performance of the various memory allocation, memory management ,Page Replacement Algorithms

YEAR / SEM: II / IV HS8461 ADVANCED READING AND WRITING

No	Course Outcomes
C218.1	Interpret the effective strategies of reading and writing.
C218.2	Infer and Read for details and write paragraphs.

C218.3	Develop content and Write different types of essays.
C218.4	Choose how to write winning job applications. Read and evaluate texts critically.
C218.5	Make use of critical reading and thinking in various professional contexts.

YEAR / SEM: III / V MA8551 ALGEBRA AND NUMBER THEORY

No	Course Outcomes
C301.1	Apply the basic notions of groups, rings, fields which will then be used to solve related problems.
C301.2	Explain the fundamental concepts of advanced algebra to apply in modern mathematics and applied contexts.
C301.3	Demonstrate accurate and efficient use of advanced algebraic techniques.
C301.4	Solve non - trivial problems related by proving simple theorems about the statements proven by the text.
C301.5	Apply integrated approach in concepts related to number theory for solving problems in Cryptography and related real time problems in computer science.

YEAR / SEM: III / V CS8591 COMPUTER NETWORKS

No	Course Outcomes
C302.1	Understand the basic layers and its functions in computer networks.
C302.2	Illustrate the basics of how the data flows from one node to another node
C302.3	Analyze and design the different routing Algorithms
C302.4	Design the protocols for various functions in the network
C302.5	Understand the working of various application layer protocols

YEAR / SEM: III / V CS8691 MICROPROCESSOR AND MICROCONTROLLER

No	Course Outcomes
C303.1	Develop 8086 microprocessor based assembly language programs for specified problem
C303.2	Examine the 8086 signals, bus structure, I/O programming and multiprocessor configurations
C303.3	Inspect various I/O interfacing mechanisms with 8086 microprocessor
C303.4	Examine various programming and application case studies based on 8086 microprocessor
C303.5	Develop 8051 microcontroller based assembly language programs for specifiedproblem

YEAR / SEM: III / V CS8501 THEORY OF COMPUTATION

No	Course Outcomes
C304.1	Define automata, regular expression for any pattern.
C304.2	Model Context free grammar for any construct.
C304.3	Design Turing machines for any given language.
C304.4	Propose computation solutions using Turing machines.
C304.5	Derive and Interpret whether given a problem is decidable or not.

YEAR / SEM: III / V CS8592 OBJECT ORIENTED ANALYSIS AND DESIGN

No	Course Outcomes
C305.1	Understand and depicts software design with UML diagrams
C305.2	Design software applications using Object Oriented concepts.
C305.3	Interpret various scenarios based on software requirements
C305.4	Translate UML based software design into pattern based design using design patterns
C305.5	Build the various testing methodologies and test for designed Object Oriented software.

YEAR / SEM: III / V OCE 552 GEOGRAPHIC INFORMATION SYSTEM

No	Course Outcomes
C306.1	Understand the fundamentals of Geographic Information System.
C306.2	Demonstrate the types of data models.
C306.3	Utilize knowledge about data input and topology.
C306.4	Discover knowledge on data quality and standards.
C306.5	Understand data management functions and data output

YEAR / SEM: III / V EC8681 MICROPROCESSOR AND MICROCONTROLLER LAB

No	Course Outcomes
C307.1	Create ALP Programmes for fixed and Floating Point and Arithmetic operations
C307.2	Build Interfaces for different I/Os with processor
C307.3	Construct different waveforms using Microprocessors
C307.4	Experiment basic programs in 8051
C307.5	compare and contrast simulator and Emulator

YEAR / SEM: III / V CS8582 OBJECT ORIENTED ANALYSIS AND DESIGN LABORATORY

No	Course Outcomes
C308.1	Build Object Oriented Analysis and design for a given problem specification.
C308.2	Interpret and map basic software requirements in UML mapping.
C308.3	Improve the software quality using design patterns and to explain the rationale behind applying specific design patterns
C308.4	Explain the rationale behind applying specific design patterns
C308.5	Test the compliance of the software with the SRS.

YEAR / SEM: III / V CS8581 NETWORKS LABORATORY

No	Course Outcomes
C309.1	Demonstrate the socket program using TCP & UDP
C309.2	Create simple applications using TCP & UDP
C309.3	Develop the code for Data link layer protocol simulation
C309.4	Examine the performances of Routing protocol
C309.5	Experiment with congestion control algorithm using network simulator

YEAR / SEM: III / VI CS8651 INTERNET PROGRAMMING

No	Course Outcomes
C310.1	Construct a basic website using HTML and Cascading Style Sheets.
C310.2	Build dynamic web page with validation using Java Script objects and by applying different event handling mechanisms.
C310.3	Develop server side programs using Servlets and JSP.
C310.4	Construct simple web pages in PHP and to represent data in XML format
C310.5	Use AJAX and web services to develop interactive web applications

YEAR / SEM: III / VI CS8691 ARTIFICIAL INTELLIGENCE

No	Course Outcomes
C311.1	Use appropriate search algorithms for any AI problem
C311.2	Present a problem using first order and predicate logic

C311.3	Utilize the apt agent strategy to solve a given problem
C311.4	Design software agents to solve a problem
C311.5	Design applications for NLP that use Artificial Intelligence.

YEAR / SEM: III / VI CS8601 MOBILE COMPUTING

No	Course Outcomes
C312.1	Explain the basics of mobile telecommunication systems.
C312.2	Illustrate the generations of telecommunication systems in wireless networks
C312.3	Determine the functionality of MAC, network layer and Identify routing protocol for a given Ad hoc network.
C312.4	Explain the functionality of Transport nd Application layers.
C312.5	Develop a mobile application using android/blackberry/ios/Windows SDK

YEAR / SEM: III / VI CS8602 COMPILER DESIGN

No	Course Outcomes
C313.1	Understand the different phases of compiler.
C313.2	Design a lexical analyzer for a sample language.
C313.3	Apply different parsing algorithms to develop the parsers for a given grammar.
C313.4	Understand syntax-directed translation and run-time environment.
C313.5	Make use of implementing code optimization techniques and a simple code generator.

YEAR / SEM: III / VI CS8603 DISTRIBUTED SYSTEMS

No	Course Outcomes
C314.1	Illustrate the foundations and issues of distributed systems.
C314.2	Understand the various synchronization issues and global state for distributed systems.
C314.3	Understand the Mutual Exclusion and Deadlock detection algorithms in distributed systems
C314.4	Describe the agreement protocols and fault tolerance mechanisms in distributed systems.
C314.5	Describe the features of peer-to-peer and distributed shared memory systems

YEAR / SEM: III / VI CS8661 INTERNET PROGRAMMING LABORATORY

No	Course Outcomes
C315.1	Construct Web pages using HTML/XML and style sheets.

C315.2	Build dynamic web pages with validation using Java Script objects and by applying different event handling mechanisms. different event handling mechanisms.
C315.3	Develop dynamic web using server side scripting.
C315.4	Make Use of PHP programming to develop web applications.
C315.5	Construct web applications using AJAX and web services.

YEAR / SEM: III / VI –CS8662 MOBILE APPLICATION AND DEVELOPMENT LAB

No	Course Outcomes
C316.1	Understand the components and structure of mobile application and build it using GUI and Layouts.
C316.2	Develop mobile applications using Event Listener.
C316.3	Create mobile applications using Databases.
C316.4	Build mobile applications using RSS Feed, Internal/External Storage, SMS, Multi-threading and GPS.
C316.5	Analyze and discover own mobile app for simple needs.

YEAR / SEM: III/VI -IT8661 MINI PROJECT

No	Course Outcomes
C317.1	Determine appropriate methodologies for solving problems related to real life situations using the engineering knowledge
C317.2	Comprehend the existing solutions and summarize problem definition
C317.3	Determine design strategies for providing solution to a problem
C317.4	Acquire skills of collaboration and working in teams
C317.5	Communicate ideas clearly both orally and in written

YEAR / SEM: IV/VII- MG 8591 PRINCIPLES OF MANAGEMENT

No	Course Outcomes
C401.1	Students will have clear understanding about management and organizations
C401.2	Students know how to plan the projects, organization premises, culture etc..
C401.3	Understanding of formal and informal organizations, charts, power and authority
C401.4	Clear idea about organizational behavior, motivational techniques
C401.5	Know about system and process of communications

YEAR / SEM: IV/VII CS 8792 CRYPTOGRAPHY AND NETWORK SECURITY

No	Course Outcomes
C402.1	Understand the fundamentals of network security, security architecture, threats, and vulnerabilities
C402.2	Apply the different cryptographic operations of symmetric cryptographic algorithms
C402.3	Apply the different cryptographic operations of public key cryptography
C402.4	Apply various Authentication schemes to simulate different applications
C402.5	Understand various Security practices and System security Standards

YEAR / SEM: IV / VII –CS 8791 CLOUD COMPUTING

No	Course Outcomes
C403.1	Appraise the concept of cloud computing and evolution of cloud from the existing technologies
C403.2	Infer the enabling technologies like service oriented architecture and virtualization in the development of cloud
C403.3	Evaluate the architecture of compute and storage of cloud service and delivery models
C403.4	Analyze the resource management and security issues of cloud computing
C403.5	Understand the appropriate technologies and approaches for implementation use of cloud

YEAR / SEM: IV /VII-CS 8079 HUMAN COMPUTER INTERACTION

No	Course Outcomes
C404.1	Understand fundamental design and evaluation methodologies of computer
C404.2	Apply effective HCI for individuals and persons with disabilities
C404.3	Analyze the cognitive computerized models and HCI implication for designing multimedia-learning web sites
C404.4	Design mobile application framework using HCI tools
C404.5	Develop web interface using various tools

YEAR / SEM: IV/VII SUPPLY CHAIN MANAGEMENT

No	Course Outcomes
C405.1	To understand with current supply chain management trends and apply chain theories, practices and concepts

C405.2	Develop a sound understanding of the important role of supply chain management in today's business environment
C405.3	Learn to use and apply computer based supply chain optimization tools currently used in business
C405.4	To Forecast Demand and supply by the use of information technology
C405.5	Demonstrate the use of critical thinking ,team building and presentation skills as applied to business problems

YEAR / SEM: IV / VII- IT 8075 SOFTWARE PROJECT MANAGEMENT

No	Course Outcomes
C406.1	Understand Project Management principles while developing software
C406.2	Gain extensive knowledge about the basic project management concepts framework and the process models
C406.3	Obtain adequate knowledge about the software process models and software effort estimation techniques
C406.4	Estimate the risks involved in various project activities
C406.5	Define the checkpoints ,project reporting structure ,project progress and tracking mechanisms using project management principles

YEAR / SEM: IV / VII -IT8711 FOSS AND CLOUD COMPUTING LABORATORY

No	Course Outcomes
C407.1	Configure various virtualization tools such as virtual Box, VMware workstation
C407.2	Design and deploy a web application in a Paas environment
C407.3	learn how to simulate a cloud environment to implement a new schedulers
C407.4	Install and use a generic cloud environment that can be used as a private cloud
C407.5	Manipulate large data sets in a parallel environment

YEAR / SEM: IV / VII – IT 8761 SECURITY LABORATORY

No	Course Outcomes
C408.1	Develop code for classical encryption techniques to solve the problems
C408.2	Build Cryptosystems by applying symmetric and public key encryption algorithms
C408.3	Construct code for authentication algorithms
C408.4	Develop a signature scheme using digital signature standard.
C408.5	Demonstrate the network security system using open source tools

YEAR / SEM: IV / VIII –GE8076 PROFESSIONAL ETHICS IN ENGINEERING

No	Course Outcomes
C409.1	Identify the Ethics and Human values in Engineering.
C409.2	Describe the types of ethical theories and moral issues in Engineering.
C409.3	Discuss the responsibilities of Engineers and code of Ethics
C409.4	Discuss the responsibilities, rights and safety in the society.
C409.5	Provide solution to the global issues, legal requirements, ethical and professional issues in the computing profession.

YEAR / SEM: IV / VIII –CS8080 INFORMATION RETERIVAL TECHNIQUES

No	Course Outcomes
C410.1	Use an open source search engine framework and explore its capabilities
C410.2	Apply appropriate method of classification or clustering.
C410.3	Design and implement innovative features in a search engine.
C410.4	Design and implement a recommender system.
C410.5	Demonstrate the entire process flow of a search engine

YEAR / SEM: IV / VIII –CS6811 PROJECT WORK

No	Course Outcomes
C411.1	Identify technically and economically feasible problems of social relevance
C411.2	Plan and build the project team with assigned responsibilities
C411.3	Identify and survey the relevant literature for getting exposed to related solutions
C411.4	Analyse, design and develop adaptable and reusable solutions of minimal complexity by using modern tools
C411.5	Implement and test solutions to trace against the user requirements