

2.6.1 Courses with Course Outcomes

REGULATION 2013

Course Name	Course Outcomes
SEMESTER – I	
HS6151 Technical English – I	<p>CO1: Apply the collaborative and social aspects of research and writing processes.</p> <p>CO2 : Comprehend that research and writing is a series of tasks, including accessing, retrieving, evaluating, analyzing and synthesizing appropriate data and information from sources that vary in content, format, structure and scope.</p> <p>CO3: Use appropriate technologies to organize, present and communicate information to address a range of audiences, purposes and genres.</p> <p>CO4: Explain the relationships among language, knowledge and power including social, cultural, historical and economic issues related to information, writing and technology.</p> <p>CO5: Demonstrate the role of a variety of technologies/ media in accessing, retrieving, managing and communicating information.</p>
MA6151 Mathematics – I	<p>CO1: Find the eigen values and eigen vectors to diagonalise and reduce a matrix to quadratic form.</p> <p>CO2: Check the converges, diverges of infinite series.</p> <p>CO3: Obtain the evaluate and envelopes of a given curves by means of radius and centre of curvature.</p> <p>CO4: Calculate the maxima and minima value functions of two variables</p> <p>CO5: Find the area of plain curves and volume of solid using double and triple integrals.</p>
PH6151 Engineering Physics – I	<p>CO1: Classify the Bravais lattices and different types of crystal structures and growth technique</p> <p>CO2: Demonstrate the properties of elasticity and heat transfer through objects.</p> <p>CO3: Explain black body radiation, properties of matter waves and Schrodinger wave equations.</p> <p>CO4: Illustrate the acoustic requirements, production and application of ultrasonics</p> <p>CO5: Examine the characteristics of laser and optical fiber.</p>
CY6151 Engineering Chemistry – I	<p>CO1: Classify the polymers and their utility in the industries and describe the techniques of polymerization & properties of polymers.</p> <p>CO2: Relate various thermodynamic functions such as enthalpy, entropy, free energy and their importance and equilibrium constant and its significance.</p> <p>CO3: Characterize the photophysical processes such as fluorescence and phosphorescence and various components of UV & IR spectrophotometer.</p> <p>CO4: Analyze the phase transitions of one component and two component systems and the types of alloys and their application in industries.</p> <p>CO5: Describe the synthesis, characteristics and the applications of nano materials.</p>

Course Name	Course Outcomes
<p style="text-align: center;">GE6151 Computer Programming</p>	<p>CO 1:Develop and manage simple application in C using basic construct CO 2:Design and implement application to work with array and string CO 3:Develop and implement application related to good modular design with in the framework of function pointer CO 4:Develop application in C using structure CO5: Ability to write the C programs to solve the problems.</p>
<p style="text-align: center;">GE6152 Engineering Graphics</p>	<p>CO1:Sketch the conic sections, special curves, and draw orthographic views from pictorial views and models. CO2:Apply the principles of orthographic projections of points in all quadrants, lines and planes in first quadrant. CO3:Sketch the projections of simple solids like prisms, pyramids, cylinder and cone and obtain the traces of plane figures CO4:Practice the sectional views of solids like cube, prisms, pyramids, cylinders & cones and extend its lateral surfaces CO5:Sketch the perspective projection of simple solids, truncated prisms, pyramids, cone and cylinders and sketch the isometric projection of simple machine parts.</p>
<p>GE6161 - Computer Practices Laboratory</p>	<p>CO 1: Prepare data using MS office for Presentation and Visualization. CO 2: Analyze the Problems and design using Flow-chart. CO 3: Solve Problems using decision making and looping Statements. CO4 : Use Arrays, Structures & Unions in problem solving. CO5: Solve Problems using Recursive Functions.</p>
<p>GE6162 - Engineering Practices Laboratory</p>	<p>CO 1:Fabricate carpentry components and pipe connections including plumbing works. CO 2: Use welding equipments to join the structures. CO 3:Carry out the basic machining operations Make the models using sheet metal works. CO 4:Illustrate on centrifugal pump, Air conditioner, operations of smithy, foundary and fittings. CO 5:Carry out basic home electrical works and appliances Measure the electrical quantities.</p>
<p>GE6163 - Physics and Chemistry Laboratory - I</p>	<p>CO1:Evaluate the wavelength of spectral lines using spectrometer, the wavelength of laser, particle size, acceptance angle of an optical fiber using semiconductor diode laser and the thickness of a thin wire through interference fringes using air wedge apparatus. CO2:Appraise the velocity of sound and compressibility of the liquid using ultrasonic interferometer and thermal conductivity for bad conductors using Lee's disc apparatus. CO3:Determine the DO content in water sample by winkler's method and molecular weight of polymer by Ostwald viscometer CO4:Find the strength of an acid using pH meter and conductometer. CO5:Estimate the amount of weak and strong acids in a mixture by conductometer.</p>

Course Name	Course Outcomes
SEMESTER – II	
<p style="text-align: center;">HS6251 Technical English – II</p>	<p>CO 1: Speak convincingly, express their opinions clearly, initiate a discussion, negotiate, argue using appropriate communicative strategies.</p> <p>CO 2: Write effectively and persuasively and produce different types of writing such as narration, description, exposition and argument as well as creative, critical, analytical and evaluative writing.</p> <p>CO 3: Read different genres of texts, infer implied meanings and critically analyse and evaluate them for ideas as well as for method of presentation.</p> <p>CO 4: Listen/view and comprehend different spoken excerpts critically and infer unspoken and implied meanings.</p> <p>CO5: Listen/view and comprehend different spoken discourses/excerpts in different accents</p>
<p style="text-align: center;">MA6251 Mathematics – II</p>	<p>CO1: Find solenoidal, irrotational vectors and explain the concepts of Green's, Gauss divergence, Stokes theorem to evaluate, single double and triple integrals</p> <p>CO2: Obtain the P.I. of Cauchy and Legendre Equation, explain the method of variation of parameters and solve simultaneous linear equations</p> <p>CO3: Evaluate Laplace Transforms of periodic functions and solve the ODE using Inverse Laplace Transform</p> <p>CO4: Recall the properties of analytic functions for verifying C-R equations and determine Bilinear Transformation</p> <p>CO5: Expand functions of two variables as Taylor's and Laurent's series and evaluate Contour integrals using Cauchy's Integral formula</p>
<p style="text-align: center;">PH6251 Engineering Physics – II</p>	<p>CO1: Illustrate classical and quantum free electron theory and calculate carrier concentration in metals.</p> <p>CO2: Describe the carrier concentration in semi conductors and identify the p-type and n-type semi conductor using hall effect.</p> <p>CO3: Classify the different types of magnetic and super conducting materials.</p> <p>CO4: Explain the dielectrics, types of polarization, losses and breakdown.</p> <p>CO5: Discuss the properties, preparation and applications of metallic alloys, SMA, nano materials, NLO, Bio-materials.</p>
<p style="text-align: center;">CY6251 Engineering Chemistry – II</p>	<p>CO1: Explain the problems of using hard water in boilers and the methods of treatment of water for boiler use.</p> <p>CO2: Design the electrochemical cells and to identify the types of corrosion and the methods of preventing.</p> <p>CO3: Illustrate the methods of harnessing energy from non-conventional energy sources.</p> <p>CO4: Classify various engineering materials and their importance.</p> <p>CO5: Relate the significance of solid, liquid and gaseous fuels and to calculate the calorific values of fuels and the requirement of air for combustion in furnaces.</p>

Course Name	Course Outcomes
<p style="text-align: center;">CS6201 Digital Principles and System Design</p>	<p>CO 1: Perform arithmetic operations in any number system. CO 2: Simplify the Boolean expression using K-Map and Tabulation techniques. CO 3: Use boolean simplification techniques to design a combinational hardware circuit. CO 4: Design and Analysis of a given digital circuit – combinational and sequential. CO 5: Design a digital circuit using PLD.</p>
<p style="text-align: center;">CS6202 Programming and Data Structures I</p>	<p>CO 1: Use the control structures of C appropriately for problems. CO 2: Implement abstract data types for linear data structures. CO 3: Apply the different linear data structures to problem solutions. CO 4: Apply and analyze the different approaches to solve the problems algorithmically CO 5: Critically analyze the various Sorting and Searching algorithms.</p>
<p style="text-align: center;">CS6211 - Digital Laboratory</p>	<p>CO 1: Use boolean simplification techniques to design a combinational hardware circuit. CO 2: Design and Implement combinational and sequential circuits. CO 3: Analyze a given digital circuit – combinational and sequential. CO 4: Design the different functional units in a digital computer system. CO 5: Design and Implement a simple digital system.</p>
<p style="text-align: center;">GE6262 - Physics and Chemistry Laboratory - II</p>	<p>CO1: Appraise the Young's modulus of the beam by uniform and non uniform bending method, the moment of inertia and Rigidity Modulus for thin wire using Torsion Pendulum CO2: Use Poiseuille's method for determining the coefficient of viscosity of the liquid. CO3: Evaluate the refractive index of spectral lines for determining the dispersive power of a prism. CO4: Determine the type, amount of alkalinity, hardness in a given water sample and evaluate the amount of copper using EDTA method CO5: Examine the potentiometric redox titration and Conductometric precipitation titration.</p>
<p style="text-align: center;">CS6212 - Programming and Data Structures Laboratory I</p>	<p>CO 1: Design and implement C programs for implementing stacks, queues, linked lists. CO 2: Apply good programming design methods for program development. CO 3: Apply the different data structures for implementing solutions to practical problems. CO 4: Apply and analyze the different approaches to solve the problems algorithmically CO 5: Develop searching and sorting programs.</p>

Course Name	Course Outcomes
SEMESTER – III	
MA6351 Transforms and Partial Differential Equations	<p>CO 1: Be capable of mathematically formulating certain practical problems in terms of partial differential equations, solve them and physically interpret the results.</p> <p>CO 2: Have gained a well founded knowledge of Fourier series, their different possible forms and the frequently needed practical harmonic analysis that an engineer may have to make from discrete data.</p> <p>CO 3: Have obtained capacity to formulate and identify certain boundary value problems encountered in engineering practices, decide on applicability of the Fourier series method of solution, solve them and interpret the results.</p> <p>CO 4: Have grasped the concept of expression of a function, under certain conditions, as a double integral leading to identification of transform pair, and specialization on Fourier transform pair, their properties, the possible special cases with attention to their applications.</p> <p>CO 5: Analyse and to solve the problem of analytic function, conformal mapping and bilinear transformations.</p>
CS6301 Programming and Data Structure II	<p>CO1: Apply Object Oriented Techniques to solve computing problems</p> <p>CO2: Apply the concepts of data abstraction, encapsulation, polymorphism and inheritance for problem solutions.</p> <p>CO3: Apply generic programming and Standard Template Library functions for simplifying program complexity</p> <p>CO4: Critically analyze the various algorithms for Tree datastructures</p> <p>CO5: Apply, design and analyze various Graph concepts to give solutions for some real time applications like finding shortest path in route map, building computer networks using minimum spanning tree.</p>
CS6302 Database Management Systems	<p>CO 1: Design Databases for applications.</p> <p>CO 2: Use the Relational model, ER diagrams.</p> <p>CO 3: Apply concurrency control and recovery mechanisms for practical problems.</p> <p>CO 4: Design the Query Processor and Transaction Processor.</p> <p>CO 5: Apply security concepts to databases.</p>
CS6303 Computer Architecture Engineering	<p>CO1: Illustrate the basic structure and operation of Digital computer</p> <p>CO2: Design Arithmetic and Logical Unit</p> <p>CO3: Design and analyze pipelined control units.</p> <p>CO4: Illustrate parallel processing architectures.</p> <p>CO5: Evaluate performance of memory system.</p>
CS6304 Analog and Digital Communication	<p>CO 1: Students obtain the knowledge on how to apply analog and digital communication technique.</p> <p>CO 2: Students learn the design and use of data and pulse communication techniques.</p> <p>CO 3: Students learn the basics of analyze Source and Error control coding.</p> <p>CO 4: Students learn the basics of utilize multi-user radio communication.</p> <p>CO 5: Apply spread spectrum modulation techniques and multiple access system to enable..</p>

Course Name	Course Outcomes
GE6351 -Environmental Science and	CO1:Analyze the concept of an ecosystem and biodiversity to protect the environment CO2:Design the environmental friendly process in engineering to protect environment from various pollutions CO3:Evaluate the techniques which require optimum use of natural resources in future CO4:Demonstrate the need for sustainable development and to create awareness of important act and laws in respect to environment. CO5:Estimate the population and economic growth,energy requirement and demand.
CS6311 - Programming and Data Structure Laboratory II	CO 1:Design and implement C++ programs for manipulating stacks, queues, linked lists, trees, and graphs. CO 2:Apply good programming design methods for program development. CO 3:Apply the different data structures for implementing solutions to practical problems. CO 4:Develop recursive programs using trees and graphs. CO 5: Apply appropriate hash functions that result in a collision free scenario for data storage and retrieval
CS6312 - Database Management Systems Laboratory	CO 1:Design and implement a database schema for a given problem-domain CO 2:Use the Relational model, ER diagrams. CO 3:Apply concurrency control and recovery mechanisms for practical problems. CO 4:Design the Query Processor and Transaction Processor. CO 5:Apply security concepts to databases.
SEMESTER – IV	
MA6453 Probability and Queueing Theory	CO 1:Understand the fundamental knowledge of the concepts of probability and have knowledge of standard distributions which can describe real life phenomenon. CO 2:Understand the basic concepts of one and two dimensional random variables and apply in engineering applications. CO 3:Apply the concept of random processes in engineering disciplines. CO 4:Acquire skills in analyzing queueing models. CO 5:Understand and characterize phenomenon which evolve with respect to time in a probabilistic manner
CS6551 Computer Networks	CO 1: Understand the basic layer and its functions in computer networks CO 2: Evaluat and analysis the performance of network CO 3: Analyze the data flow from one Host to another host CO 4: Analyze and design the various functions and in the network CO5: Create a node to node connectivity network for data sharing
CS6401 Operating Systems	CO1 :Explain the basic concepts and functions of Operating Systems CO2 :Outline various threading models, process synchronization and deadlocks CO3 : Compare and contrast various memory management scheme. CO4 : Design And implement a prototype file system. CO5 :Model Linux multifunction server and utilize local network services.

Course Name	Course Outcomes
CS6402 Design and Analysis of Algorithms	CO 1:Design algorithms for various computing problems. CO 2:Analyze the time and space complexity of algorithms. CO 3:Critically analyze the different algorithm design techniques for a given problem. CO 4:Modify existing algorithms to improve efficiency. CO5: Outline the limitation of Algorithmic power
EC8506 Microprocessors and Microcontroller	CO 1:Design and execute programs based on 8086 microprocessor CO 2:Design memory interfacing circuits CO 3:Design and interface microprocessors with supporting CO 4:Design and analyze the architecture of 8051 microcontroller CO 5:Design and analyze the microcontroller based system
CS6403 Software Engineering	CO 1:Identify the key activities in managing a software project. CO 2:Compare different process models. CO 3:Concepts of requirements engineering and Analysis Modeling. CO 4:Apply systematic procedure for software design and deployment. CO 5:Compare and contrast the various testing and maintenance.
CS6411 - Networks Laboratory	CO 1:Implement various protocols using TCP and UDP. CO 2:Compare the performance of different transport layer protocols. CO 3:Use simulation tools to analyze the performance of various network protocols. CO 4:Analyze various routing algorithms. CO 5:Implement error correction codes.
CS6412 – Microprocessors and Microcontroller Lab	CO 1:Write ALP Programmes for fixed and Floating Point and Arithmetic CO 2:Interface different I/Os with processor CO 3:Generate waveforms using Microprocessors CO 4:Execute Programs in 8051 CO 5:Explain the difference between simulator and Emulator
CS6413 – Operating Systems Laboratory	CO1 :Experiment with Unix commands and shell programming CO2 :Build ‘C’ program for process and file system management using system calls CO3 :Choose the best CPU scheduling algorithm for a given problem instance CO4 :Identify the performance of various page replacement algorithms CO5 :Develop algorithm for deadlock avoidance, detection and file allocation strategies
SEMESTER V	
MA 6566 Discrete Mathematics	CO1:To identify the structures on many levels and apply the concepts needed to test the logic of the programs CO2:Have an understanding of a class of functions which transform a finite set which relates to input and output functions in computer science. CO3:Analyze the various graph models. CO4:Understand the concepts and properties of algebraic structures. CO5:Apply the Boolean functions in computer science.

Course Name	Course Outcomes
CS6501 Internet Programming	CO 1: Design and Develop Java Based Standalone Application and Web Application CO 2: Create a basic website using HTML and Cascading Style Sheets. Construct basic Website using HTML and CSS CO 3: Design and implement dynamic web page with validation using JavaScript objects and by applying different event handling mechanisms. CO 4: Design and implement server side programs using Servlets and JSP on Java server pages technology. CO 5: Design and implement simple web page in PHP, and to present data in XML format.
CS6502 Object Oriented Analysis and Design	CO 1: Design and implement projects using OO concepts. CO 2: Make use of the design diagrams and Analyse CO 3: Have knowledge to apply appropriate patterns CO 4: Demonstrate code from Design CO 5: Compare various testing techniques
CS6503 Theory of Computation	CO 1: Construct automata, regular expression for any pattern. CO 2: Write Context free grammar for any construct. CO 3: Design Turing machines for any language. CO 4: Propose computation solutions using Turing machines. CO 5: Derive whether a problem is decidable or not.
CS6504 Computer Graphics	CO 1: Design two dimensional graphics. CO 2: Apply two dimensional transformations. CO 3: Design three dimensional graphics and transformation. CO 4: Apply Illumination, Clipping techniques and color models. CO 5: Apply clipping techniques to graphics.
CS6511 - Case Tools Laboratory	CO 1: Design and implement projects using OO concepts. CO 2: Use the UML analysis and design diagrams. CO 3: Apply appropriate design patterns. CO 4: Create code from design. CO 5: Compare and contrast various testing techniques
CS6512 - Internet Programming Laboratory	CO 1: Design Web pages using HTML/XML and style sheets CO 2: Create user interfaces using Java frames and applets. CO 3: Create dynamic web pages using server side scripting. CO 4: Use the frameworks JSP Strut, Hibernate, Spring CO 5: Create applications with AJAX
CS6513 - Computer Graphics Laboratory	CO 1: Knowledge on various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, clipping. CO 2: Implement various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, clipping. CO 3: Create 3D graphical scenes using open graphics library suits CO 4: Implement image manipulation and enhancement CO 5: Create 2D animations using tools.

Course Name	Course Outcomes
SEMESTER VI	
CS6601 Distributed Systems	CO 1:Elucidate the foundations and issues of distributed systems CO 2:Understand the various synchronization issues and global state for distributed systems. CO 3:Understand the Mutual Exclusion and Deadlock detection algorithms in distributed systems CO 4:Describe the agreement protocols and fault tolerance mechanisms in distributed systems. CO 5:Describe the features of peer-to-peer and distributed shared memory system
IT6601 Mobile Computing	CO1: Illustrate the basics concepts of Mobile Computing. CO2: Choose the required functionality at each layer for given application. CO3: Illustrate the basics of mobile telecommunication system. CO4: Design an Adhoc network such as MANET and VANET. CO5: Apply the knowledge about different Mobile platforms for developing mobile application.
CS6660 Compiler Design	CO 1:Understand the different phases of compiler. CO 2:Design a lexical analyzer for a sample language. CO 3:Apply different parsing algorithms to develop the parsers for a given grammar. CO 4:Understand syntax-directed translation and run-time environment. CO 5:Learn to implement code optimization techniques and a simple code Generator
IT6502 Digital Signal Processing	CO1:To understand the importance of signals and systems and their mathematical representation CO2:To analyze the z-transform techniques & their computation CO3:To apply DFT for the analysis of different signals and systems CO4:Design of IIR filters and their implementation and design of FIR filters & their implementation CO5:To acquire knowledge on digital signal processors
CS6659 Artificial Intelligence	CO 1:Identify problems that are amenable to solution by AI methods. CO 2:Identify appropriate AI methods to solve a given problem. CO 3:Formalise a given problem in the language/framework of different AI methods. CO 4:Implement basic AI algorithms. CO 5:Design and carry out an empirical evaluation of different algorithms on a problem formalisation, and state the conclusions that the evaluation supports.

Course Name	Course Outcomes
CS6654 – Datamining and Datawarehousing	CO1:Identify the scope and necessity of Data Mining & Warehousing for the society CO2:Describe the designing of Data Warehousing so that it can be able to solve the root problems. CO3:To understand various tools of Data Mining and their techniques to solve the real time problems. CO4:To develop ability to design various algorithms based on data mining tools CO5:To develop further interest in research and design of new Data Mining techniques.
CS 6611 – Mobile Application Development Laboratory	CO 1:Develop mobile applications using GUI and Layouts. CO 2:Develop mobile applications using Event Listener. CO 3:Develop mobile applications using Databases. CO 4:Develop mobile applications using RSS Feed, Internal/External Storage, SMS, Multi-threading and GPS. CO 5:Analyze and discover own mobile app for simple needs.
CS6612 - Compiler Laboratory	CO 1:Implement the different Phases of compiler using tools CO 2:Analyze the control flow and data flow of a typical program CO 3:Optimize a given program CO 4:Generate an assembly language program equivalent to a source language program CO 5: Design and implement a scanner and a parser using LEX and YACC tools.
GE6674 - Communication and Soft Skills - Lab	CO1: Read technical texts and write read specific texts effortlessly. CO2: Listen and comprehend lectures and talks in their area of specialisation successfully. CO3: Speak appropriately and effectively in varied formal and informal contexts. CO4: Write reports and winning job applications. CO 5: Develop awareness of appropriate communication strategies.
SEMESTER VII	
CS6701 Cryptography and Network Security	CO 1:Understand the fundamentals of networks security, security architecture, threats and vulnerabilities CO2:Apply the different cryptographic operations of symmetric cryptographic algorithms CO 3:Apply the different cryptogrphic operations of public key cryptography CO 4:Apply the various Authentic tion schemes to simulate different applications. CO 5:Understand various Security practices and System security standards
CS6702 Graph Theory and Applications	CO 1:Write precise and accurate mathematical definitions of objects in graph theory. CO 2: Identify and construct examples. CO 3: Validate and critically assess a mathematical proof. CO 4: Apply creative investigation of questions in graph theory. CO 5: construct mathematical proofs.

Course Name	Course Outcomes
CS6703 Grid and Cloud Computing	CO 1:Articulate the main concepts, key technologies, strengths and limitations of cloud computing. CO 2:Learn the key and enabling technologies that help in the development of cloud. CO 3:Develop the ability to understand and use the architecture of compute and storage cloud, service and delivery models. CO 4:Explain the core issues of cloud computing such as resource management and security. CO 5:Evaluate and choose the appropriate technologies, algorithms and approaches for implementation and use of cloud.
CS6704 Resource Management Techniques	CO1:Understand the Linear Programming problems of Graphical and simplex methods CO2:Apply the Transportation and Assignment model in industrial field CO3:Apply integer programming and linear Programming to solve real-life applications. CO4:Analyze the Jacobi and Lagrange Methods in Optimisation theory CO5:Create the PERT and CPM Network diagram in Project Management
IT6801 Service Oriented Architecture	CO1:Understand XML technologies CO2:Understand service orientation, benefits of SOA CO3:Understand web services and WS standards CO4:Use web services extensions to develop solution CO5:Understand and apply service modeling, service oriented analysis and design for application development
IT6007 Information Retrieval	CO 1:Apply information retrieval models. CO 2:Design Web Search Engine. CO 3:Use Link Analysis. CO 4:Use Hadoop and Map Reduce. CO 5:Apply document text mining techniques.
CS6711 - Security Laboratory	CO 1:Develop code for classical Encryption Techniques to solve the problems. CO 2:Build cryptosystems by applying symmetric and public key encryption algorithms. CO 3:Construct code for authentication algorithms. CO 4:Develop a signature scheme using Digital signature standard. CO 5:Demonstrate the network security system using open source tools
CS6712 - Grid and Cloud Computing Laboratory	CO 1:Configure various virtualization tools such as Virtual Box, VMware workstation. CO 2:Design and deploy a web application in a PaaS environment. CO 3:Learn how to simulate cloud environment to implement new schedulers. CO 4:Install and use a generic cloud environment that can be used as a private cloud. CO 5:Manipulate large data sets in a parallel environment.

Course Name	Course Outcomes
SEMESTER VIII	
CS6801 Multicore Architecture	CO1: Describe multicore architectures and identify their characteristics and challenges. CO2: Identify the issues in programming Parallel Processors. CO3: Write programs using OpenMP and MPI. CO4: Design parallel programming solutions to common problem CO5: Compare and contrast programming for serial processors and programming for parallel processors.
CS6008 Human Computer Interaction	CO1: Analyse the Effective dialog for HCI CO2: Designing of specific HCI for Individual with disabilities CO3: Access the Importance of User Feedback CO4: Design of Multimedia and E commerce CO5: Develop Meaningful interfaces
GE6075 Professional Ethics	CO1: Construct a basic perception on various moral, human values and ethics. CO2: Identify and analyze profession, professional ethics, moral issues and the role of ethical theories in engineering field CO3: Identify an insight of social responsibilities and the code of ethics to be followed by an engineer. CO4: Identify the professional rights and responsibilities of an engineer for safety and risk benefit analysis. CO5: Apply ethical principles to resolve situations that arise in their professional lives
CS6811 - Project Work	CO 1: The ability to make links across different areas of domain knowledge and to generate, develop and evaluate ideas and information so as to apply these skills to the project task. CO2 : Acquire the skills to communicate effectively and to present ideas clearly and coherently to specific audience in both the written and oral forms. CO3 : Acquire collaborative skills through working in a team to achieve common goals. CO 4: Acquire collaborative skills through working in a team to achieve common goals. CO 5: Demonstrate and build the project successfully by hardware requirements, coding, emulating and testing.

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2.6.1 Courses With Course Outcomes

REGULATION 2017

Course Name	Course Outcomes
SEMESTER I	
HS8151- Communicative English	<p>CO1: Read articles of a general kind in magazines and newspapers.</p> <p>CO2: Participate effectively in informal conversations; introduce themselves and their friends and express opinions in English.</p> <p>CO3: Comprehend conversations and short talks delivered in English</p> <p>CO4: Write short essays of a general kind and personal letters and emails in English.</p> <p>CO5: Understand basic grammar principles and be able to synthesize and transform sentences.</p>
MA8151 Engineering Mathematics I	<p>CO1: Apply both the limit definition and rules of differentiation to different functions. Solve maxima and minima of functions.</p> <p>CO 2: To analyse and solve the partial differentiation for functions of several variables by various methods.</p> <p>CO 3: Evaluate integrals by using various techniques of integration such as substitution, partial fraction and by parts.</p> <p>CO 4: Apply integration to compute multiple integrals, Area, Volume in Polar in addition to change of order.</p> <p>CO 5: Apply various techniques in solving differential equations.</p>
PH8151- Engineering Physics	<p>CO 1: The students will gain knowledge on the basics of properties of matter and its applications.</p> <p>CO 2: The students will acquire knowledge on the concepts of waves and optical devices and their applications in fiber optics.</p> <p>CO 3: The students will have adequate knowledge on the concepts of thermal properties of materials and their applications in expansion joints and heat exchangers.</p> <p>CO 4: The students will get knowledge on advanced physics concepts of quantum theory and its applications in tunneling microscopes.</p> <p>CO 5: The students will understand the basics of crystals, their structures and different crystal growth techniques.</p>
CY8151 - Engineering Chemistry	<p>CO:1 Design water treatment techniques by analyzing the requirement of boiler feed water and its problems</p> <p>CO:2 Analyse the various Industrial applications of Surface Chemistry and Catalysis by understanding the basic concepts</p> <p>CO:3 Develop the applications to single and two component systems by understanding the basic concepts of phase rule and to appreciate the significance of alloys.</p> <p>CO:4 Analyzing the manufacture of various types of fuels and to interpret its calorific value during combustion</p> <p>CO:5 Evaluating the production of electricity from different non conventional energy sources and to analyse the types of batteries and its efficiency.</p>

Course Name	Course Outcomes
GE8152 - Engineering Graphics	CO 1:Familiarize with the fundamentals and standards of Engineering graphics CO2:Perform freehand sketching of basic geometrical constructions and multiple views of objects. CO 3:Draw projections and solids and development of surfaces. CO 4:Visualize and to project isometric and perspective sections of simple solids. CO5: Draw orthographic projection of solids like cylinders, cones, prisms and pyramids including sections.
GE8151 – Problem Solving and Python Programming	CO 1:Adapt and analyse and develop standard algorithm to solve problem CO 2:Identify and use the appropriate data types for variable being critically aware of memory. CO 3:Design and implement control flow and function concept in python program for solving problem. CO 4:Implement python data structure list, tuple and dictionary for representing complex data problem. CO 5:Develop and Implement python file modules and function which reacts robust to exceptional input for solving real world problem.
GE 8161 – Problem Solving and Python Programming Laboratory	CO 1:Write, test, and debug simple Python programs. CO 2:Implement Python programs with conditionals and loops. CO 3:Develop Python programs step-wise by defining functions and calling them CO 4:Use Python lists, tuples, dictionaries for representing compound data CO 5:Read and write data from/to files in Python.
BS8161 - Physics & Chemistry Laboratory	CO 1:Apply physics principles of optics and thermal physics to evaluate engineering properties of material. CO 2:Apply principles of elasticity, optics and thermal properties for engineering applications. CO 3:Evaluating quantitative chemical analysis of water quality related Parameters CO4 :Knowledge of methods to determine the calorific value of fuels, perform flue gas analysis and combustion analysis. Apply the science for understanding corrosion and its prevention. CO5: Demonstrate a knowledge of superconducting and organic electronic materials.
SEMESTER II	
HS8251- Technical English	CO 1:Read technical texts and write area- specific texts effortlessly. CO 2:Listen and comprehend lectures and talks in their area of specialisation successfully. CO 3:Speak appropriately and effectively in varied formal and informal contexts. CO 4:Write reports and winning job applications. CO 5:Learn phonetic symbols and use correct sound, stress and intonation.

Course Name	Course Outcomes
MA8251 - Engineering Mathematics II	CO 1: Evaluate Eigen values and vectors, Diagonalization of matrices, positive definite matrices and similar matrices. CO2: Analyse and to solve the problem of vector differentiation and vector Integration. CO 3: Analyse and to solve the problem of analytic function, conformal mapping and bilinear transformations. CO 4: Evaluate the real integrals by applying the concept of complex integration CO 5: Analyse and apply the knowledge of Laplace Transform in solving ODE.
PH8252 Physics for Information science	CO 1: Gain knowledge on classical and quantum electron theories, and energy band structures, CO 2: Acquire knowledge on basics of semiconductor physics and its applications in various devices, CO 3: Get knowledge on magnetic properties of materials and their applications in data storage, CO 4: Have the necessary understanding on the functioning of optical materials for optoelectronics, CO 5: Understand the basics of quantum structures and their applications in carbon electronics.
BE 8255 Basic Electrical, Electronics and Measurement Engineering	CO 1: Discuss the essentials of electric circuits and analysis. CO 2: Discuss the basic operation of electric machines and transformers CO 3: Introduction of renewable sources and common domestic loads. CO 4: Introduction to measurement and metering for electric circuits. CO 5: Identify and select appropriate type of transducer for measurement of different quantities.
GE8291 Environmental science and Engineering	CO1: Analyze the concept of an ecosystem and biodiversity to protect the Environment. CO2: Design the environmental friendly process in engineering to protect environment from various pollutions. CO3: Evaluate the techniques which require optimum use of natural resources in Future. CO4: Demonstrate the need for sustainable development and to create awareness of important act and laws in respect to environment. CO5: Estimate the population and economic growth, energy requirement and demand.
CS 8251 Programming in C	CO 1: Develop and manage simple application in C using basic construct. CO 2: Design and implement application to work with array and string. CO 3: Develop and implement application related to good modular design with in the framework of function pointer. CO 4: Develop application in C using structure. CO 5: Design and implement real time application using file processing.

Course Name	Course Outcomes
GE 8261 Engineering Practice Laboratory	CO 1:Fabricate carpentry components and pipe connections including plumbing works. CO 2: Use welding equipments to join the structures. CO 3:Carry out the basic machining operations Make the models using sheet metal works. CO 4:Illustrate on centrifugal pump, Air conditioner, operations of smithy, foundary and fittings. CO 5:Carry out basic home electrical works and appliances Measure the electrical quantities.
CS 8261 C Programming Laboratory	CO 1: Learn the data types and syntax of C language. CO 2: Develop C programs for simple applications making use of basic constructs, arrays and strings. CO 3:Develop C programs involving functions, recursion, pointers, and structures. CO 4:Design applications using sequential and random access file processing. CO 5:Demonstrate capability to choose appropriate algorithm to get the solutions for a problem
SEMESTER III	
MA 8351 Discrete Mathematics	CO 1:Have knowledge of the concepts needed to test the logic of a program. CO 2:Have an understanding in identifying structures on many levels. CO 3:Be aware of a class of functions which transform a finite set into another finite set which relates to input and output functions in computer science. CO 4:Be aware of the counting principles. CO 5:Be exposed to concepts and properties of algebraic structures such as groups, rings and fields
CS 8391 Data Structures	CO 1:Implement abstract data types for linear data structures. CO 2:Identify the appropriate datastructures for the representation CO 3:Apply the different linear and non-linear data structures to problem solutions. CO 4:Apply and analyze the different approaches to solve the problems algorithmically CO 5:Critically analyze the various sorting algorithms.
CS8351 Digital Principles and Systems Design	CO 1:Simplify Boolean functions using KMap CO 2:Design and Analyze Combinational and Sequential Circuits CO 3:Implement designs using Programmable Logic Devices CO 4:Write HDL code for combinational and Sequential Circuits CO 5:Design and analyze synchronous and Asynchronous circuits
CS8392 Object Oriented Programming	CO 1:Develop Java programs using OOP principles CO 2:Develop Java programs with the concepts inheritance and interfaces CO 3:Build Java applications using exceptions and I/O streams CO 4:Develop Java applications with threads and generics classes CO 5:Develop interactive Java programs using swings

Course Name	Course Outcomes
EC8395 Communication Engineering	CO 1:Analyze and design analog modulation and demodulation system. CO 2:Analyze and design and develop pulse modulators and multiplex them. CO 3:Analyze and design digital modulation and demodulation system. CO 4:Perform coding techniques and apply error control codes for error control and correction. CO 5:Apply spread spectrum modulation techniques and multiple access system to enable.
CS 8382 Digital Principles and System Design Laboratory	CO 1:Implement simplified combinational circuits using basic logic gates. CO 2:Implement combinational circuits using MSI devices. CO 3:Implement sequential circuits like registers and counters. CO 4:Simulate combinational and sequential circuits using HDL. CO 5:Model Memory arrays for any Boolean function.
CS 8381 Data Structures Laboratory	CO 1: Implement linear and non-linear data structure operations. CO 2: Apply appropriate linear / non-linear data structure operations for solving a given problem. CO 3: Appropriately use the linear / non-linear data structure operations for a given problem. CO 4:Apply appropriate hash functions that result in a collision free scenario for data storage and retrieval CO 5:Apply Algorithm for solving problems like sorting, searching, insertion and deletion of data.
CS8382 Object Oriented Programming Laboratory	CO 1:Develop and implement Java programs for simple applications that make use of classes, packages and interfaces. CO 2:Develop and implement Java programs with arraylist, exception handling and multithreading . CO 3:Design applications using file processing, generic programming and event handling. CO 4:Understand dynamic memory management techniques using pointers, constructors, destructors, etc CO 5: Describe the concept of function overloading, operator overloading, virtual functions and polymorphism
HS 8381 Interpersonal Skills/ Listening and Speaking	CO 1:Listen and respond appropriately. CO 2:Participate in group discussions CO 3:Make effective presentations CO 4:Participate confidently and appropriately in conversations both formal and informal CO 5: Develop awareness of appropriate communication strategies.
SEMESTER IV	
MA8402 - Probability and Queueing Theory	CO 1:Understand the fundamental knowledge of the concepts of probability and have knowledge of standard distributions which can describe real life phenomenon. CO 2:Understand the basic concepts of one and two dimensional random variables and apply in engineering applications. CO 3:Apply the concept of random processes in engineering disciplines. CO 4:Acquire skills in analyzing queueing models. CO 5:Understand and characterize phenomenon which evolve with respect to time in a probabilistic manner

Course Name	Course Outcomes
CS 8451- Design and Analysis of Algorithms	CO 1:Design algorithms for various computing problems. CO 2:Apply the appropriate algorithms to solve the problems. CO 3:Analyze the time and space complexity of algorithms. CO 4:Critically analyze the different algorithm design techniques for a given problem. CO 5:Modify existing algorithms to improve efficiency.
CS 8491 - Computer Organization and Architecture	CO 1:Illustrate the basic structure and operation of digital computer CO 2:Design arithmetic and logic unit CO 3:Design and Analyze pipelined control units CO 4:Illustrate parallel processing architectures. CO 5:Evaluate performance of memory systems.
CS8494- Software Engineering	CO 1:Identify the key activities in managing a software project and Compare different process models. CO 2:Understand Concepts of requirements engineering and Analysis Modeling CO 3:Apply systematic procedure for software design and deployment. CO 4:Compare and contrast the various testing and maintenance. CO 5:Manage project schedule, estimate project cost and effort required
CS 8493 - Operating Systems	CO1:Understand the basics of operating systems like kernel, shell, types and views of operating systems CO 2:Design various Scheduling algorithms and apply the principles of concurrency with the Design of deadlock, prevention and avoidance algorithms and compare various memorymanagement schemes. CO3:Explain various memory management techniques and concept of thrashing CO 4:Use disk management and disk scheduling algorithmsfor better utilization of external memory and Recognize file system interface, protection and securitymechanisms. CO 5:Explore the architecture and features of Andriod OS and Linux.
CS 8492- Database Management Systems	CO 1:Design DB in SQL. Classify the modern and futuristic database applications based on size and complexity CO 2:Analyze and Map ER model to Relational model to perform database design effectively CO 3:Design DB using normalization criteria and optimize queries CO 4:Analyze, Compare and contrast various indexing strategies in different database systems CO 5:Analyze and Appraise how advanced databases differ from traditional databases.

Course Name	Course Outcomes
CS8461 – Operating Systems Lab	CO 1: Compare the performance of various CPU Scheduling Algorithms CO 2: Implement Deadlock avoidance and Detection Algorithms CO 3: Implement Semaphores CO 4: Create processes and implement IPC CO 5: Analyze the performance of the various Page Replacement Algorithms
CS8481 - Database Management Systems Lab	CO 1: Design Databases for applications. CO 2: Use the Relational model, ER diagrams. CO 3: Apply concurrency control and recovery mechanisms for practical problems. CO 4: Design the Query Processor and Transaction Processor. CO 5: Apply security concepts to databases.
HS 8461 Advanced Reading and writing	CO 1: Write different types of essays. CO 2: Write winning job applications. CO 3: Read and evaluate texts critically. CO 4: Display critical thinking in various professional contexts CO 5: Analyze a variety of communication acts.
SEMESTER – V	
MA8551 Algebra and Number Theory	CO 1: Apply the basic notions of groups, rings, fields. CO 2: Explain the fundamental concepts of advanced algebra. CO 3: Demonstrate accurate and efficient use of advanced algebraic techniques. CO 4: Demonstrate their manstry by solving non-trivial problems CO 5: Apply integrated approach to number theory and abstract algebra
CS8591- Computer Networks	CO 1: Understand the basic layer and its functions in computer networks CO 2: Evaluate and analysis the performance of network CO 3: Analyze the data flow from one Host to another host CO 4: Analyze and design the various functions and in the network CO 5: Create a node to node connectivity network for data sharing
CS8501 - Theory of Computation	CO 1: Construct automata, regular expression for any pattern. CO 2: Write Context free grammar for any construct. CO 3: Design Turing machines for any language. CO 4: Propose computation solutions using Turing machines. CO 5: Derive whether a problem is decidable or not.

CS8592 Object Oriented Analysis and Design	CO 1:Analyze the software design with UML diagrams CO 2:Design Software applications using OO concept CO 3:Identify various scenarios based on the requirements. CO 4:Transform UML based software design using design patterns. CO 5:Understand the various testing methodologies.
Course Name	Course Outcomes
EC 8691- Microprocessors and Microcontrollers	CO 1:Design and execute programs based on 8086 microprocessor CO 2:Design memory interfacing circuits CO 3:Design and interface microprocessors with supporting CO 4:Design and analyze the architecture of 8051 microcontroller CO 5:Design and analyze the microcontroller based system
OCE552 Geographic Information systems	CO 1:Having the basic idea of fundamentals of GIS CO 2:Understand the types of datamodels CO 3:Get knowledge about data inputs and topologoly CO 4:Get knowledge on data quality and standards CO 5:Understand data management functions and data input.
CS8581 - Networks Laboratory	CO 1:Implement various protocols using TCP and UDP. CO 2:Compare the performance of different transport layer protocols. CO 3:Use simulation tools to analyze the performance of various network protocols. CO 4:Analyze various routing algorithms. CO 5:Implement error correction codes.
CS8582 - Object Oriented Analysis & Design Lab	CO 1: Demonstrate the Conceptual model of UML and SDLC. CO 2: Define classes modeling techniques and instances modeling techniques CO 3: Describe interaction diagrams and their modeling techniques. CO 4: Demonstrate activity diagram and their modeling techniques. CO 5: Demonstrate component and deployment diagram
EC8681 – Microprocessors and Microcontroller Laboratory Lab	CO 1:Write ALP Programmes for fixed and Floating Point and Arithmetic operations CO 2:Interface different I/Os with processor CO 3:Generate waveforms using Microprocessors CO 4:Execute Programs in 8051 CO 5:Explain the difference between simulator and Emulator
SEMESTER VI	
CS8691- Artificial Intelligence	CO 1:Use appropriate search algorithms for any AI problem CO 2:Represent a problem using first order and predicate logic CO 3:Provide the apt agent strategy to solve a given problem CO 4:Design software agents to solve a problem CO 5:Design applications for NLP that use Artificial Intelligence.

Course Name	Course Outcomes
CS8651 Internet Programming	CO 1:Develop a basic website using HTML and Cascading Style Sheets CO 2:Design and develop a dynamic web page with validation using JavaScript CO 3:Design and develop a server side programs using Servlets and JSP CO 4:Build a simple web page in PHP with XML data format CO 5:Develop interactive web application using web service and AJAX
CS8602- Compiler Design	CO 1:Understand the different phases of compiler. CO 2:Design a lexical analyzer for a sample language. CO 3:Apply different parsing algorithms to develop the parsers for a given grammar. CO 4: Understand syntax-directed translation and run-time environment. CO 5:Learn to implement code optimization techniques and a simple code generator
CS8601 Mobile Computing	CO 1:Understand the basics of mobile telecommunication system CO 2:Choose the required functionality at each layer for given application CO 3:Identify solution for each functionality at each layer CO 4:Use simulator tools and design Ad hoc networks develop a mobile application CO 5:Design an Hybrid Mobile Application
CS8603 Distributed Systems	CO 1:Elucidate the foundations and issues of distributed systems CO 2:Understand the various synchronization issues and global state for distributed systems. CO 3:Understand the Mutual Exclusion and Deadlock detection algorithms in distributed systems CO 4:Describe the agreement protocols and fault tolerance mechanisms in distributed systems. CO 5:Describe the features of peer-to-peer and distributed shared memory system
IT8076 Software Testing	CO 1:Have an ability to apply software testing knowledge and engineering methods. CO 2:Have an ability to understand software testing problems and solve them. CO 3:Have an ability to design and conduct various types and levels of software testing. CO 4:Have basic knowledge of contemporary issues in software testing & planning. CO 5:Have an ability to identify the needs of software test automation and develop a test tool to support test automation.

CS8661 - Internet Programming Lab	CO 1:Develop a Web Page using HTML and CSS CO 2:Build a dynamic web page using java script CO 3:Develop a dynamic web page using Server side scripting CO 4:Develop Web application using PHP CO 5:Construct Web application using AJAX and web service
Course Name	Course Outcomes
CS8662 – Mobile Application Development Laboratory	CO 1:Develop mobile applications using GUI and Layouts. CO 2:Develop mobile applications using Event Listener. CO 3:Develop mobile applications using Databases. CO 4:Develop mobile applications using RSS Feed, Internal/External Storage, SMS, Multi-threading and GPS. CO 5:Analyze and discover own mobile app for simple needs.
CS8611 Miniproject	CO 1: The ability to make links across different areas of domain knowledge and to generate, develop and evaluate ideas and information so as to apply these skills to the project task. CO2 : Acquire the skills to communicate effectively and to present ideas clearly and coherently to specific audience in both the written and oral forms. CO3 : Acquire collaborative skills through working in a team to achieve common goals. CO 4: Acquire collaborative skills through working in a team to achieve common goals. CO 5:Demonstrate and build the project successfully by hardware requirements, coding, emulating and testing.
HS8581Professional Communication	CO 1:Make effective presentations CO 2:Participate confidently in Group Discussions. CO 3:Attend job interviews and be successful in them. CO 4:Develop adequate Soft Skills required for the workplace CO 5: Develop awareness of appropriate communication strategies.
SEMESTER VII	
MG8591 -Principle of Management	CO 1: Identify and communicate the purpose and functions of management. CO2: Demonstrate an understanding of the impact of globalisation on management and the role cultural factors play in the workplace CO3: Discuss methods of employee compensation and their impact on employee motivation CO 4: Illustrate the components of business strategy. CO 5: Apply the concepts of decision making in a business situation.
CS 8792 - Cryptography and Network Security	CO 1:Understand the fundamentals of networks security, security architecture, threats and vulnerabilities CO 2:Apply the different cryptographic operations of symmetric cryptographic algorithms CO 3:Apply the different cryptogrphic operations of public key cryptography CO 4:Apply the various Authentiction schemes to simulate different applications. CO 5:Understand various Security practices and System security standards.
CS 8791 Cloud computing	CO 1:Articulate the main concepts, key technologies, strengths and limitations of cloud computing. CO 2:Learn the key and enabling technologies that help in the development of cloud. CO 3:Develop the ability to understand and use the architecture of compute and

	<p>storage cloud, service and delivery models.</p> <p>CO 4: Explain the core issues of cloud computing such as resource management and security.</p> <p>CO 5: Be able to install and use current cloud technologies.</p>
Course Name	Course Outcomes
OME752 - Supply Chain Management	<p>CO1: To understand the scope and fundamentals of Supply Chain Management and the drivers of Supply Chain performance</p> <p>CO2: To design suitable SC network for a given situation.</p> <p>CO3: To solve the issues related to Logistics in Supply Chain Management.</p> <p>CO4: To understand Sourcing, Coordination and current issues in Supply Chain Management.</p> <p>CO5: Critically appraise the applications of IT in Supply Chain Management and apply supply Chain Management concepts in selected enterprise</p>
GE8077 – Total Quality Management	<p>CO1: Apply the tools and techniques of quality management to manufacturing and service process.</p> <p>CO2: Evaluate the principles of quality management and to explain how these principles can be applied within quality management systems.</p> <p>CO3: Identify the key aspects of the quality improvement cycle and to select and use appropriate tools and techniques for controlling, improving and measuring quality.</p> <p>CO4 : Critically appraise the organizational, communication and teamwork requirements for effective quality management</p> <p>CO5: Critically analyse the strategic issues in quality management, including current issues and developments, and to devise and evaluate quality implementation plans</p>
CS 8079 Human Computer Interaction	<p>CO 1: Design effective dialog for HCI</p> <p>CO 2: Design effective HCI for individuals and persons with disabilities.</p> <p>CO 3: Assess the importance of user feedback.</p> <p>CO 4: Explain the HCI implications for designing multimedia/ ecommerce/ e-learning Web sites.</p> <p>CO 5: Develop meaningful user interface.</p>
CS 8711 Cloud Computing Laboratory	<p>CO 1: Configure various virtualization tools such as Virtual Box, VMware workstation.</p> <p>CO 2: Design and deploy a web application in a PaaS environment.</p> <p>CO 3: Learn how to simulate cloud environment to implement new schedulers.</p> <p>CO 4: Install and use a generic cloud environment that can be used as a private cloud.</p> <p>CO 5: Manipulate large data sets in a parallel environment.</p>
IT8761 Security Laboratory	<p>CO 1: Develop code for classical Encryption Techniques to solve the problems.</p> <p>CO 2: Build cryptosystems by applying symmetric and public key encryption algorithms.</p> <p>CO 3: Construct code for authentication algorithms.</p> <p>CO 4: Develop a signature scheme using Digital signature standard.</p> <p>CO 5: Demonstrate the network security system using open source tools</p>

Course Name	Course Outcomes
SEMESTER VIII	
GE8076 – Professional Ethics in Engineering	CO1: Construct a basic perception on various moral, human values and ethics. CO2: Identify and analyze profession, professional ethics, moral issues and the role of ethical theories in engineering field CO3: Identify an insight of social responsibilities and the code of ethics to be followed by an engineer. CO4: Identify the professional rights and responsibilities of an engineer for safety and risk benefit analysis. CO5: Apply ethical principles to resolve situations that arise in their professional lives.
CS8080 Information Retrieval Techniques	CO 1: Use an open source search engine framework and explore its capabilities CO 2: Apply appropriate method of classification or clustering. CO 3: Ability to use knowledge of data structures and indexing methods in information retrieval Systems CO 4: Design and implement innovative features in a search engine. CO 5: Design and implement a recommender system.
CS8811 Project Work	CO 1: The ability to make links across different areas of domain knowledge and to generate, develop and evaluate ideas and information so as to apply these skills to the project task. CO2 : Acquire the skills to communicate effectively and to present ideas clearly and coherently to specific audience in both the written and oral forms. CO3 : Acquire collaborative skills through working in a team to achieve common goals. CO 4: Acquire collaborative skills through working in a team to achieve common goals. CO 5: Demonstrate and build the project successfully by hardware requirements, coding, emulating and testing.

V. R. Kotha
HOD

