Karpaga Vinayaga College of Engineering and Technology
Department of Computer Science and Engineeing
Course Outcomes (R-2017)

	HS8185- Communicative English
C101.1	Enable the development in sharing information about family and friends.
C101.2	Strengthen general comprehending skills and present lucid skills in free
C101.3	Understand the basic grammar techniques and utilize it in enhancing language development
C101.4	Foster an environment for reading and develop good language skills
C101.5	Develop flair for any kind of writing with rich vocabulary and proper syntax.
C101.6	Proficiency in writing technical articles and presenting papers on any topic of any genre
	MA8151-Engineering Mathematics 1
C102.1	Diagonalize symmetric matrices and similar matrices using Eigen values and Eigen vectors.
C102.2	Explain gradients, potential functions, and directional derivatives of functions of several variables
C102.3	Compute line, surface and volume integral using Gauss divergence, Green's and stoke's theorem
C102.4	Discuss analytic functions in heat and fluid flow
C102.5	Extend the concept of contour integrals in evaluating Real integrals
C102.6	Discuss Laplace Transform methods to solve initial value problems for constant coefficient linear ODEs
	PH8151-Engineering Physics
C103.1	Discuss the Young's modulus and Rigidity modulus of elasticity of materials and its determination through experimental methods
C103.2	Explain the characteristics of laser light and their application in semiconductor laser
C103.3	Discuss the principle behind the propagation of light through an optical fibre and its application in sensors
C103.4	Summarize the different modes of heat transfer
C103.5	Relate the quantum concepts in electron microscopes.
C103.6	Describe the unit cell characteristics and the growth of crystals
	CY8151-Engineering Chemistry
C104.1	Explain boiler feed water requirements, related problems and water treatment techniques.
C104.2	explain basic concepts of phase rule and its applications to single and two component systems and appreciate the purpose and significance of alloys
C104.3	Explain Preparation, properties and applications of engineering materials
C104.4	Describe types of fuels, calorific value calculations, manufacture of solid, liquid and gaseous fuels.
C104.5	Explain principles and generation of energy in batteries, nuclear reactors, solar cells, wind mills and fuel cells.
C104.6	Describe concepts of absorption and catalysis
	GE8151- Problem Solving and Python Programming
C105.1	Develop algorithmic solutions to simple computational problems
C105.2	Read, write, execute by hand simple Python programs
C105.3	Structure simple Python programs for solving problems

C105.4	Decompose a Python program into functions
C105.5	Explain compound data using Python lists, tuples, dictionaries
C105.6	Read and write data from/to files in Python Programs
	GE8152- Engineering graphics
C106.1	Discuss about conics and orthographic views of engineering components
C106.2	Illustrate the projection of points, lines and planes
C106.3	Classify solids and projection of solids at different positions
C106.4	Explain sectioned view of solids and development of surface
C106.5	Illustrate isometric projection and perspective views of an object/solid
C106.6	Apply the concept of drawing in practical applications
	GE8161- Problem Solving and Python Programming Laboratory
C107.1	Write, test, and debug 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	Use Python lists, tuples, dictionaries for representing compound data.
C107.5	Read and write data from/to files in Python.
C107.6	Formulate problems and implement algorithms in python
	BS8161 - Physics and Chemistry Laboratory
C108.1	Determne Rigidity modulus, Young's modulus, wavelength of mercury spectrum
C108.2	Determine Young‘s modulus by non-uniform bending method
C108.3	Determine thickness of a thin wire – Air wedge method
C108.4	Acquire hands-on knowledge in the quantitative chemical analysis of water quality related parameters.
C108.5	Determine thermal conductivity of a bad conductor – Lee‘s Disc method
C108.6	Determine water quality parameters through volumetric and instrumental analysis of sound and compressibility of liquid – Ultrasonic interferometer
	HS8251-Technical English
C109.1	Breakdown the ideas in to its elementary constituents, analyze and act after a meaning full thought process
C109.2	Analyze the phrase and passage and explicitly pass on the ideas meaning fully
C109.3	Manage to interpret the given phrase or the graphical rendering and review the contents well individually or as a group
C109.4	Concentrate on the communication aspect of complicated ideas and respond positively
C109.5	Debate the issues and find the rudiments of the problem individually and as a group.
C109.6	Respond intelligently and seek clarification and understand completely.
	MA8251 Engineering Mathematics -II
C110.1	Apply Laplace transform technique to solve the given ordinary differential equation
C110.2	Explainconcepts of vector calculus, needed for problems in all engineering disciplines.
C110.3	Compute line, surface and volume integral using Gauss divergence, Green’s and stoke’s theorem.

C110.4	Find the singularities and its corresponding residues for the given function.
C110.5	Find double integral over general areas and triple integral over general volumes
C110.6	Apply Gauss Divergence theorem for evaluating the surface integral.
	PH8252-Physics For Information Science
C111.1	Discuss about Wiedemann Franz law and the conduction in solids
C111.2	Associate the concept of quantum electron theories with energy band structures.
C111.3	Discuss the carrier concentration in semiconducting materials
C111.4	Explain the origin of magnetism and the properties of magnetic materials.
C111.5	Discuss the working of Opto-electronic devices
C111.6	Summarize the basics of quantum structures and their applications in nano devices
	BE8255-Basic Electrical, Electronics And Measurement Engineering
C112.1	Illustrate the behavior of electric circuits using fundamental laws and techniques
C112.2	Explain the operation of DC, AC and Special machines
C112.3	Summarize different energy sources, protective devices and its applications
C112.4	Outline the characteristics and applications of semiconductor diodes.
C112.5	Summarize the characteristics and errors of the instruments
C112.6	Explain the working of different types of Analog Instruments and transducers
	GE8291 Environmental Science And Engineering
C113.1	Summarize the values, threats, conservation of biodiversity and ecosystems
C113.2	Discuss the sources, effects, control measures of different types of pollution, and solid waste management
C113.3	Associate the effects of exploitation of Natural resources on environment
C113.4	Summarize the water conservation methods and various environmental acts for environmental sustainability
C113.5	Explain the effect of Human population and role of IT in environment and human health
C113.6	Discuss scientific, technological, economic and social solutions to environmental problems
	CS8251 Programming In C

C114.1	Explain the syntax for C programming
C114.2	Associate the programs in 'C' for real world situation
C114.3	Apply the concepts of Arrays, Strings in 'C' language for user defined problems.
C114.4	Apply the concept of functions and pointers
C114.5	Associate the programs with structure using 'C' language
C114.6	Discuss to read and write data from/to files in 'C' Programs and develop simple applications
	GE8261 - Engineering Practices Laboratory
C115.1	Tools and Techniques used for Sheet Metal Fabrication
C115.2	use of welding equipment to join the structures.
C115.3	measure various electrical quantities
C115.4	working of electronic components and its utilization
C115.5	electronic principles to develop circuits for primitive application
C115.6	Demonstrate Plumbing requirements of domestic buildings
	CS8261 C Programming Laboratory
C116.1	C programs for simple applications making use of basic constructs
C116.2	C programs for simple applications making use of arrays and strings
C116.3	C programs involving functions, and recursion,
C116.4	C programs involving pointers, and structures
C116.5	Design applications using sequential and random access file processing
C116.6	C programs for real time applications
	MA8351 Discrete Mathematics
C201.1	concept of elementary mathematical logical arguments
C201.2	basic counting techniques to solve combinatorial problems
C201.3	applications of Graph theory models and data structures
C201.4	concepts and properties of algebraic structures such as groups, rings and fields
C201.5	concepts of Boolean algebra in the area of lattices
C201.6	knowledge of argumental discrete mathematical problems
	CS8351 Digital Principles And System Design
C202.1	Explain the the Boolean functions using K-Map

C202.2	Interpret Combinational circuits for a given functions using logic gates.
C202.3	Recognise Synchronous Sequential circuits for the given condition
C202.4	Recognise Asynchronous Sequential circuits for the given condition
C202.5	Apply Programmable Logic towards memory management
C202.6	Solve verilog codes for the design of digital circuits
	CS8391 Data Structures
C203.1	Describe linear data structures using array and linked list
C203.2	Apply data structures like stacks, queues in linear data structure
C203.3	Discuss non-linear data structures tree and its application
C203.4	Apply various algorithms in graph.
C203.5	Solve searching, sorting and hashing techniques in data structures.
C203.6	Interpret sorting algorithms for a give problem
	EC8395 Communication Engineering
C204.1	Describe the concepts of analog modulation systems.
C204.2	Illustrate pulse communication techniques
C204.3	Summarize the concepts of digital modulation systems.
C204.4	Apply the source coding techniques.
C204.5	Explain the basic principles in the generation of spread spectrum signals
C204.6	Explain the methods of multiple access in communication systems
	CS8381 Data Structures Laboratory

C205.1	Write functions to implement linear and non-linear data structure operations
C205.2	Suggest appropriate linear / non-linear data structure operations for solving a given problem
C205.3	Make use of linear / non-linear data structure operations for a given problem
C205.4	Apply appropriate hash functions that result in a collision free scenario for data storage and retrieval
C205.5	Apply sorting and searching algorithms for the given problem
C205.6	Apply the different data structures for implementing solutions to practical problems.
	CS8382 Digital Systems Laboratory
C206.1	Design simplified combinational circuits using basic logic gates
C206.2	Design combinational circuits using MSI devices
C206.3	Design sequential circuits like registers and counters
C206.4	Simulate combinational and sequential circuits using HDL
C206.5	Design and implementation of 4-bit binary adder / subtractor
C206.6	Design and Implement a simple digital system.
	HS8381 Interpersonal Skills/Listening&Speaking
C207.1	Listen and respond appropriately
C207.2	Participate in group discussions
C207.3	Make effective presentations
C207.4	Participate confidently and appropriately in conversations both formal and informal
C207.5	Improve general and academic listening skills
C207.6	Improve adequate emotional intelligence

	MA8402 Probability And Queuing Theory
C208.1	Discuss the concepts of the fundamental Probability Theory, Baye's theorem
C208.2	Associate the concepts of Standard distributions with real life phenomena.
C208.3	Summarize the concepts of covariance, correlation and regression . central limit theorem
C208.4	Explain the concept of Markov chain in terms of a transition probability matrix and transition diagram..
C208.5	Extend birth and death processes which evolve with respect to time in a probabilistic manner
C208.6	Interpret the Queuing models.
	CS8491 Computer Architecture
C209.1	Describe the basic structures of a computer system
C209.2	Explain the various arithmetic operations for computers.
C209.3	Analyze pipelined control units and the different types of hazards in the instructions.
C209.4	Interpret the concepts of parallel processing architecture
C209.5	Summarize the fundamentals of memory system
C209.6	Describe the concepts of I/O system
	CS8492 Database Management Systems
C210.1	Discuss the fundamental concepts of relational database and SQL
C210.2	Use ER model for Relational model mapping to perform database design effectively
C210.3	Summarize the properties of transactions and concurrency control mechanisms
C210.4	Outline the various storage and optimization techniques
C210.5	Compare and contrast various indexing strategies in different database systems

C210.6	Explain the different advanced databases
	CS8451 Design And Analysis Of Algorithms
C211.1	Discuss the fundamental concepts problem solving algorithm, its types and the parameters to analyze those algorithms
C211.2	Explain the Brute Force method and Divide and Conquer method to solve computing problems
C211.3	Explain the dynamic programming and greedy techniques to solve computing problems.
C211.4	Describe how scientific problems can be solved using iterative method and how to cope with limitations of algorithm power
C211.5	Critically analyze the different algorithm design techniques for a given problem based on its time and space complexity.
C211.6	Modify existing algorithms to improve efficiency
	CS8493 Operating Systems
C212.1	Explain the overall view of the computer system and operating system
C212.2	Identify various scheduling algorithm and deadlock prevention and avoidance algorithm
C212.3	Compare and contrast various memory management schemes and file system functionalities
C212.4	Discuss the performance of the various page replacement algorithms and interpret the file system implementation, sharing and protection mechanisms.
C212.5	Demonstrate administrative tasks on Linux servers and to be familiar with the basics of Mobile OS
C212.6	Make use of various algorithms to solve computing problems
	CS8494 Software Engineering
C213.1	Identify the key activities in managing a software project and recognize different process model
C213.2	Explain the concepts of requirements engineering and Analysis Modeling
C213.3	Outline the systematic procedures for software design and deployment

C213.4	Compare various testing and maintenance methods
C213.5	Interpret the project schedule, estimate project cost and effort required
C213.6	Develop a software using the software engineering principles
	CS8481 Database Management Systems Laboratory
C214.1	Use typical data definitions and manipulation commands
C214.2	Design applications to test Nested and Join Queries
C214.3	Implement simple applications that use Views
C214.4	Implement applications that require a Front-end Tool
C214.5	Critically analyze the use of Tables, Views, Functions and Procedures
C214.6	Apply advanced SQL Queries
	CS8461 Operating Systems Laboratory
C215.1	Compare the performance of various CPU Scheduling Algorithms
C215.2	Implement Deadlock avoidance and Detection Algorithms
C215.3	Implement Semaphores and Create processes, implement IPC
C215.4	Analyze the performance of the various Page Replacement Algorithms
C215.5	Implement File Organization and File Allocation Strategies
C215.6	Apply the file system related system calls
	HS8461 Advanced Reading And Writing
C216.1	Write different types of essays
C216.2	Write winning job applications

C216.3	Read and evaluate texts critically.
C216.4	Display critical thinking in various professional contexts
C216.5	Develop their project and proposal writing skills
C216.6	Develop the algorithem for various sorting methods
	MA8551 Algebra and Number Theory
C217.1	Summarize the notations and properties of algebraic structures such as groups, rings and fields
C217.2	Explain the concepts of finite fields and polynomials to solve problems in advanced algebra.
C217.3	Associate the applications of divisibility theory and canonical decompositions
C217.4	Describe the concept of Diophantine equations and congruences and exhibit the efficient use of advanced algebraic techniques in number theory.
C217.5	Extend the concepts of multiplicative functions and classical theorems
C217.6	Associate the knowledge of integrated approach to Number theory and abstract algebra
	CS8591 Computer Networks
C301.1	Identify various layers of network and discuss the functions of physical layer
C301.2	Discuss how data flows from one node to another node with regard to data link layer
C301.3	Explain the different services of network layer
C301.4	Compare the different transport layer protocols and their applicability based on user requirements
C301.5	Describe the working of various application layer protocols
C301.6	Evaluate the performance of network and analyze routing algorithms
	EC8691 Microprocessor and Microcontrollers
C302.1	Explain the architecture and instruction set of Microprocessor

C302.2	Discuss about System Bus Structure for Multiprocessor Configuration
C302.3	Infer the functions of various interfacing integrated chips
C302.4	Explain the architectures and instruction set of Microcontroller
C302.5	Illustrate the functions of various interfacing devices with Microcontroller
C302.6	Build an assembly language program for interfacing
	CS8501 Theory of Computation
C303.1	Design automata for any given pattern
C303.2	Specify regular expression of string pattern
C303.3	Write context free grammar for any language
C303.4	Apply Turing machine to propose computation solutions
C303.5	Interpret whether a problem is decidable or not
C303.6	Interpret NP class problems
	CS8592 Object Oriented Analysis and Design
C304.1	Express the software design concepts with UML diagram
C304.2	Construct the domain model and design model to various use case scenarios.
C304.3	Design software applications using object oriented concepts.
C304.4	Identify various scenarios based on software requirements
C304.5	Transform UML based software design into pattern based design using design patterns
C304.6	Explain the various testing methodologies for object oriented software.
	OMD553 Telehealth Technology

C305.1	Understand the ethical and legal aspects of telemedicine
C305.2	Apply multimedia technologies in telemedicine.
C305.3	Explain Protocols behind encryption techniques for secure transmission of data.
C305.4	Understand the mobile telemedicine
C305.5	Understand the mobile teleradiology
C305.6	Apply telehealth in healthcare
	EC8681 Microprocessor and Microcontroller lab
C306.1	Write ALP Programmes for fixed and Floating Point and Arithmetic operations
C306.2	Interface different I/Os with processor
C306.3	Generate waveforms using Microprocessors
C306.4	Execute Programs in 8051
C306.5	Explain the difference between simulator and Emulator
C306.6	Discuss about the difference between Serial and Parallel Interface
	CS8582 Object Oriented Analysis and design Lab
C307.1	Perform OO analysis and design for a given problem specification
C307.2	Identify and map basic software requirements in UML mapping.
C307.3	Improve the software quality using design patterns
C307.4	Explain the rationale behind applying specific design patterns
C307.5	Test the compliance of the software with the SRS.
C307.6	Create code from design

	CS8581 Networks Lab
C308.1	Implement various protocols using TCP and UDP.
C308.2	Compare the performance of different transport layer protocols
C308.3	Use simulation tools to analyze the performance of various network protocols
C308.4	Analyze various routing algorithms.
C308.5	Implement error correction codes.
C308.6	Apply hands on experience on various networking protocols.
	CS8651 Internet Programming
C309.1	Demonstrate simple website using HTML and CSS.
C309.2	Build dynamic web pages with validation using Java Script objects and apply different event handling mechanisms.
C309.3	Illustrate server side programs using Servlet and JSP.
C309.4	Demonstrate simple web pages in PHP and to represent data in XML format.
C309.5	Illustrate AJAX and web services to develop interactive web applications
C309.6	Develop interactive web applications for real world problems
	CS8691 Artificial Intelligence
C310.1	List the characteristics and types of intelligent agents
C310.2	Interpret search algorithms for any AI problem
C310.3	Illustrate a problem using first order and predicate logic
C310.4	Explain the appropriate agent strategy to solve a given problem
C310.5	Develop software agents to solve a problem

C310.6	Demonstrate applications for NLP that use Artificial Intelligence
	CS8601 Mobile Computing
C311.1	Understand the basic concepts of mobile computing
C311.2	Explain the basics of mobile telecommunication systems
C311.3	Illustrate the generations of telecommunication systems in wireless networks
C311.4	Demonstrate the functionality of MAC, network layer and Identify a routing protocol for a given Ad hoc network
C311.5	Explain the functionality of Transport and Application layers
C311.6	Develop a mobile application using android/blackberry/ios/Windows SDK
	CS8602 Compiler Design
C312.1	Illustrate a lexical analyzer for a sample language
C312.2	Explain different parsing algorithms to develop the parsers for a given grammar
C312.3	Understand syntax-directed translation and run-time environment
C312.4	Understand intermediate code generation and run-time environment
C312.5	Apply code optimization techniques for programming construct
C312.6	Develop a scanner and a parser using LEX and YACC tools.
	CS8603 Distributed Systems
C313.1	Elucidate the foundations and issues of distributed systems
C313.2	Understand the various synchronization issues and global state for distributed systems
C313.3	Comprehend the Mutual Exclusion and Deadlock detection algorithms in distributed systems
C313.4	Show the use of agreement protocols and fault tolerance mechanisms in distributed systems.

C313.5	Relate the features of peer-to-peer and distributed shared memory systems
C313.6	Interpret the real-time distributed system applications
	CS8075 Datawarehousing and Data Mining
C314.1	Design a Data warehouse system and perform business analysis with OLAP tools.
C314.2	Apply suitable pre-processing and visualization techniques for data analysis
C314.3	Apply frequent pattern and association rule mining techniques for data analysis
C314.4	Apply appropriate classification and clustering techniques for data analysis
C314.5	Explain outlier detection methods
C314.6	Apply weka tool for different datasets
	CS8661 Internet Programming Lab
C315.1	Construct Web pages using HTML/XML and style sheets
C315.2	develop user interfaces using Java frames and applets.
C315.3	Build dynamic web pages with validation using Java Script objects and by applying different event handling mechanisms
C315.4	Develop dynamic web pages using server side scripting.
C315.5	Use PHP programming to develop web applications.
C315.6	Construct web applications using AJAX and web services
	CS8662 Mobile Application Development Lab
C316.1	Develop mobile applications using GUI and Layouts.
C316.2	Develop mobile applications using Event Listener.
C316.3	Develop mobile applications using Databases.

C316.4	Develop mobile applications using RSS Feed, Internal/External Storage, SMS, Multi-threading and GPS.
C316.5	Understand the capabilities and limitations of mobile devices.
C316.6	Analyze and discover own mobile app for simple needs.
	CS8611 Mini Project
C317.1	Identify the problem by applying acquired knowledge
C317.2	Analyze and categorize executable project modules after considering risks
C317.3	Make use of efficient tools for designing project modules.
C317.4	Combine all the modules through effective team work after efficient testing.
C317.5	Elaborate the completed task and compile the project report.
C317.6	Document properly and demonstrate the Work
	HS8581 Professional Communication
C318.1	Make effective presentations
C318.2	Participate confidently in Group Discussions.
C318.3	Attend job interviews and be successful in them.
C318.4	Develop adequate Soft Skills required for the workplace
C318.5	Interpret the findings with appropriate technological / research citation.
C318.6	Explain managing time and managing stress
	MG8591 Principles Of Management
C401.1	Discuss the evolution of management thoughts and the challenges of managerial activities in a global business environment.
C401.2	Explain the types of Planning and Decision making methodologies in Organizations

C401.3	Summarize various types of Organization structure and associated Human Resources activities for man-power utilization.
C401.4	Explain about motivation theories, behavior, leadership theories and communication for effective directing.
C401.5	Explain various Controlling techniques to maintain standards in Organizations
C401.6	Associate managerial functions and knowledge on international aspect for Organizational growth
	CS8792 Cryptography And Network Security
C402.1	Describe the fundamentals of networks security, security architecture, threats and vulnerabilities
C402.2	Discuss the mathematical support for both symmetric and asymmetric key cryptography
C402.3	Make use of symmetric key cryptographic algorithms to perform cryptographic operations
C402.4	Solve cryptographic operations using public key cryptographic algorithms
C402.5	Apply the various Authentication schemes to simulate different applications.
C402.6	Explain various Security practices and System security standards
	CS8791 Cloud Computing
C403.1	Articulate the main concepts, key technologies, strengths and limitations of cloud computing
C403.2	Explain the key and enabling technologies that help in the development of cloud.
C403.3	Make use of NIST cloud computing architecture to solve architecture design challenges
C403.4	Explain the core issues of cloud computing such as resource management and security
C403.5	Install and use current cloud technologies.
C403.6	Illustrate and choose the appropriate technologies, algorithms and approaches for implementation and use of cloud.
	CS8083 Multicore Architectures And Programming
C404.1	Describe multicore architectures and identify their characteristics and challenges.

C404.2	Identify the issues in programming Parallel Processors
C404.3	Write programs using OpenMP and MPI
C404.4	Design parallel programming solutions to common problems
C404.5	Compare and contrast programming for serial processors and programming for parallel processors
C404.6	Develop multi-core programs and design parallel solutions.
	CS8082 Machine Learning Techniques
C405.1	Differentiate between supervised, unsupervised, semi-supervised machine learning approaches
C405.2	Discuss the decision tree algorithm and indentity and overcome the problem of overfitting
C405.3	Discuss and apply the back propagation algorithm and genetic algorithms to various problems
C405.4	Apply the Bayesian concepts to machine learning
C405.5	Analyse and suggest appropriate machine learning approaches for various types of problems
C405.6	Explain advanced learning
	OBM752 Hospital Management
C406.1	Explain the principles of Hospital administration.
C406.2	Identify the importance of Human resource management.
C406.3	List various marketing research techniques.
C406.4	Identify Information management systems and its uses.
C406.5	Understand safety procedures followed in hospitals
C406.6	Explain Planning of Communication, Modes of Communication
	CS8711 Cloud Computing Laboratory

C407.1	Configure various virtualization tools such as Virtual Box, VMware workstation
C407.2	Design and deploy a web application in a PaaS environment link layer
C407.3	Learn how to simulate a cloud environment to implement new schedulers
C407.4	Demonstrate generic cloud environment that can be used as a private cloud
C407.5	Manipulate large data sets in a parallel environment.
C407.6	Apply Hadoop single node cluster and run simple applications
	IT8761 Security Laboratory
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
C408.6	Exhibit ethical principles in engineering practices
	GE8076 Professional Ethics in Engineering
C409.1	Describe the human values with regard to the individual life style for the society
C409.2	Explain the role of ethics to the engineering field
C409.3	Describe how engineering is applied in association with ethics based on engineering experimentation
C409.4	Explain the engineering ethics based safety, responsibilities and rights
C409.5	Discuss the global issues of professional ethics in engineering
C409.6	Experiment the professional ethics in engineering based product development

	CS8080 Information Retrieval Techniques
C410.1	Interpret 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 an open source search engine framework and explore its capabilities
C410.6	Demonstrate the entire process flow of a search engine
	CS8811 Project Work
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
C411.6	Deploy and support the solutions for better manageability of the solutions and provide scope for improvability