SRKR ENGINEERING COLLEGE::BHIMAVARAM

Department of Computer Science and Engineering

R15

COURSE OUTCOMES

Program Name: B.Tech (Computer Science and Engineering)

Course Name: (ENGLISH)

COURSE	COURSE OUTCOMES	
ENGLISH ENG 1101	C111.1	Able to apply LSRW skills effectively in communicative discourse.
	C111.2	Able to apply vocabulary in communicative contexts.
	C111.3	Able to make presentations on various topics of current trends.
	C111.4	Analyse and compose efficiently to enrich professional communication.
	C111.5	Apply grammar rules in framing sentences.
	C111.6	Able to function as a member or leader in diverse terms with acquired communication skills.

Course Name: (MATHEMATICS-I)

COURSE	COURSE OUTCOMES	
MATHEMATICS-I ENG 1102	C112.1	Apply the knowledge of partial differentiation for change of variables, for finding tangent plane and normal to a surface.
	C112.2	Identify maxima and minima of functions of two variables, find errors and use the concept of differentiation under integral sign for evaluation of certain definite integrals.
	C112.3	Model ordinary differential equations and solve first order linear differential equations.
	C112.4	Find orthogonal trajectories and find solutions for simple physical problems such as electrical circuits, Newton's law of cooling, Law of natural growth or decay.
	C112.5	Solve linear higher order differential equations with constant coefficients, simultaneous equations and also equations of Cauchy's and Legendre's type.
	C112.6	Find the nature, interval of convergence of an infinite series.

Course Name: (MATHEMATICS-II)

COURSE	COURSE OUTCOMES	
MATHEMATICS-II ENG 1103	C113.1	Solve system of linear simultaneous equations. Determine Eigen values and Eigenvectors of a given square matrix.
	C113.2	Classify quadratic forms and learn about complex matrices.
	C113.3	Find Laplace transforms of different types of functions and evaluate certain integrals.
	C113.4	Find inverse Laplace transform and solve ODEs using Laplace transforms.
	C113.5	Find series solutions of Legendre & Bessel's equations and learn properties of Legendre polynomials & Bessel functions of first kind.

Course Name: (CHEMISTRY)

COURSE	COURSE OUTCOMES	
CHEMISTRY ENG 1104	C114.1	To apply the knowledge about quality of water and its treatment methods for domestic and industrial applications. Understanding the principle, mechanism of corrosion and utilization of various techniques to control.
	C114.2	Ability to prepare polymer composites, synthetic polymers and formulation of polymers
	C114.3	To develop the knowledge of fuels and their economics, advantages and limitations. To make use of the basic concepts of semiconductors and liquid crystals for engineering applications.
	C114.4	Identify constituents of various ceramic materials, characteristics and their appropriate use in construction.

Course Name: (C PROGRAMMING & NUMERICAL METHODS)

COURSE	COURSE OUTCOMES	
C PROGRAMMING & NUMERICAL METHODS ENG 1105	C115.1	Identify and apply the basic concepts of C programming language to given problems.
	C115.2	Develop user defined functions to solve real time problems.
	C115.3	Implement programs using advanced concepts in C language.
	C115.4	Develop programs to evaluate different numerical methods.

Course Name: (HISTORY OF SCIENCE AND TECHNOLOGY)

COURSE	COURSE OUTCOMES	
HISTORY OF SCIENCE AND TECHNOLOGY ENG 1106	C116.1	Identify basic roots of science and technology in India
	C116.2	Illustrate the plans after independence.
	C116.3	Examine Research & Development in India.
	C116.4	Discuss science and technological developments in Major areas.

Course Name: (CHEMISTRY LAB)

COURSE	COURSE OUTCOMES	
Chemistry LAB ENG 1107	C117.1	Able to gain technical knowledge of measuring, operating and testing of chemical instruments and equipment. Carrying out different types of chemical reactions for analysing different materials in micro level quantities.
	C117.2	An ability to analyse and generate experimental skills to enhance the analytical thinking capabilities in the modern trends in engineering and technology.

Course Name: (C PROGRAMMING & NUMERICAL METHODS LAB)

COURSE	COURSE OUTCOMES	
C PROGRAMMING & NUMERICAL METHODS LAB ENG 1108	C118.1	Develop programs using different control statements.
	C118.2	Experiment with pre defined functions, develop User defined functions.
	C118.3	Utilize dynamic memory allocation in writing programs with the help of pointers.
	C118.4	Develop programs to solve various numerical methods.

SEMESTER: 2 **COURSE YEAR: 2015-2016**

Course Name: (MATHEMATICS-III)

COURSE	COURSE OUTCOMES	
MATHEMATICS-III ENG1201	C121.1	Identify constituent of concrete material characteristics and different types of concrete for their appropriate use in construction.
	C121.2	Illustrate proportioning of different types of concrete mixes for required fresh and hardened properties using professional codes.
	C121.3	Distinguish concrete behaviour based on its fresh and hardened properties.
	C121.4	Prepare a comprehensive report on new knowledge in any one of the topic related to concrete technology.

Course Name: (PHYSICS)

COURSE	COURSE OUTCOMES	
PHYSICS ENG 1202	C122.1	Understand the concept of heat and work, their relation and converting heat to work and vice versa and related aspects.
	C122.2	Learn the concept of flux-electric and magnetic, study the electric and magnetic fields and mutual inter conversion and also elementary ideas of electromagnetic fields.
	C122.3	Explain different light phenomena like interference, diffraction and polarisation Using wave theory and understand production of amplified light and light propagation in optical fibbers and ultrasonic's as new technologies.
	C122.4	Understand the dual nature of matter and conformation of wave nature of electrons ; Horizon of energy bands and classification of solids; concept of superconductivity and nano materials and their utilities.

Course Name: (PROBABILITY, STATISTICS AND QUEUING THEORY)

COURSE	COURSE OUTCOMES	
PROBABILITY, STATISTICS AND QUEUING THEORY ENG 1203	C123.1	To illustrate the concept of a random variable, generating functions and their properties
	C123.2	To learn different probability functions and analyse various statistical measures of a few discrete/continuous distributions.
	C123.3	To understand and compute the correlation coefficient, and estimation techniques from regression lines.
	C123.4	To fit a linear or nonlinear curves using method of least squares.
	C123.5	To develop a framework for testing of hypothesis in giving inferences about Population Parameters
	C123.6	To study Queuing models and their Characteristics

Course Name: (ENGINEERING GRAPHICS)

COURSE	COURSE OUTCOMES	
ENGINEERING GRAPHICS ENG 1204	C124.1	Construct various engineering curves such as conic sections, cycloids, involutes.
	C124.2	Apply principle of orthographic projections to draw projection of points, lines and planes.
	C124.3	Draw the projection of solids, sections of solids and develop the surfaces of solids.
	C124.4	Convert the isometric projection to orthographic projection and vice versa.

Course Name: (PHYSICS LAB)

COURSE	COURSE OUTCOMES	
Physics LAB ENG 1206	C126.1	Students get hands on experience in setting up experiments and using the instruments / equipment individually.
	C126.2	Get introduced to using new/ advanced technologies and understand their significance.

Course Name: (WORK SHOP)

COURSE	COURSE OUTCOMES	
WORK SHOP ENG 1207	C127.1	Environmental, sustainable and cultural strengthening joints made from wood, sheet metal and mild steel for a life long learning
	C127.2	Functioning and communicating as an individual in a team to write and prepare effective reports on experiments conducted in the laboratory

Course Name: (ENGLISH LAB)

COURSE	COURSE OUTCOMES	
ENGLISH LAB ENG 1208	C128.1	Apply the various aspects of English language proficiency with an emphasis on LSRW skills.
	C128.2	Apply team skills through language learning activities.
	C128.3	Analyse English speech sounds, syllable, stress, rhythm and intonation patterns for better listening comprehension.
	C128.4	Exhibit an acceptable etiquette essential in social settings.
	C128.5	Able to neutralise the MTI in order to improve fluency and clarity in spoken English.

SEMESTER: 3 **COURSE YEAR: 2016-2017**

Course Name: C211 (DATA STRUCTURES)

COURSE	COURSE OUTCOMES	
DATA STRUCTURES C211	C211.1	Identify how arrays, records, linked structures, stacks, queues, trees, and graphs are represented in memory.
	C211.2	Apply stacks, linked lists, queues and trees to solve different Computer Science problems and Engineering problems.
	C211.3	Compare alternative implementations of data structures with respect to performance.
	C211.4	Apply the principal algorithms for sorting and searching to the given data and analyze the computational efficiency.
	C211.5	Demonstrate the usefulness of Graphs in real life applications.

Course Name: C212 (ELECTRONICS I)

COURSE	COURSE OUTCOMES	
ELECTRONICS I C212	C212.1	Apply the fundamentals of semiconductor theory to analyze the characteristics of p-n junction diode and Special diodes.
	C212.2	Analyze rectifier circuits with & without filters.
	C212.3	Illustrate the characteristics of Bipolar junction transistor (BJT) and compare three configurations
	C212.4	Design of biasing circuits for BJTs & FETs.
	C212.5	Illustrate the characteristics of Field effect transistor (FET) and compare JFET and MOSFET

Course Name: C213 (DISCRETE MATHEMATICAL STRUCTURES)

COURSE	COURSE OUTCOMES	
DISCRETE MATHEMATICAL STRUCTURES C213	C213.1	Translate mathematical arguments using logical connectives and quantifiers and verify the validity of the arguments using propositional and predicate logic.
	C213.2	Solve the counting problems and calculate the binomial and multinomial coefficients
	C213.3	Identify and give examples of various types of recurrence relations and describe their properties.
	C213.4	Explain the properties of relations and their operations.
	C213.5	Utilize the concepts of graph theory in computer science.
	C213.6	List out different tree structures which help them understand 'data structures'.

Course Name: C214 (OBJECT ORIENTED PROGRAMMING)

COURSE	COURSE OUTCOMES	
OBJECT ORIENTED PROGRAMMING C214	C214.1	Illustrate various UML diagrams.
	C214.2	Demonstrate classes, member functions, constructors and their importance in developing real world applications.
	C214.3	Apply features of templates and Inheritance to make programs support reusability.
	C214.4	Make use of virtual functions, Polymorphism and Exception handling in developing programs.
	C214.5	Illustrate the process of file manipulations to implement various file operations.

Course Name: C215 (ELEMENTS OF ELECTRICAL ENGINEERING)

COURSE	COURSE OUTCOMES	
ELEMENTS OF ELECTRICAL ENGINEERING C215	C215.1	Students will able to Express the fundamentals of magnetic and electric circuits.
	C215.2	Students will able to classify the parts of DC Machines, Transformers, Three Phase Induction motors & Synchronous machines.
	C215.3	Students will able to explain the operation and working principle of DC Machines, Transformers, Three Phase Induction motors and synchronous machines.
	C215.4	Students will able to analyze the performance characteristics of various machines.
	C215.5	Students will able to employ the suitable machine for a particular application.

Course Name: C216 (DIGITAL LOGIC DESIGN)

COURSE	COURSE OUTCOMES	
DIGITAL LOGIC DESIGN C216	C216.1	Utilize the knowledge of different number systems , binary codes , compliments to perform arithmetic operations
	C216.2	Identify different Boolean algebra theorems and make use of them for logic functions.
	C216.3	Construct the Karnaugh Map for a few variables to perform an algebraic reduction of logic functions.
	C216.4	Analyze and design combinational and sequential circuits.
	C216.5	Design digital systems on reconfigurable programmable logic devices.
	C216.6	Develop system modelling using Hardware Description Language.

Course Name: C217 (DATA STRUCTURES LAB)

COURSE	COURSE OUTCOMES	
DATA STRUCTURES LAB C217	C217.1	Identify and Use suitable data structures and algorithms to solve a real world problem.
	C217.2	Implement and Analyze various operations on Linear ,non Linear Data Structures, Sorting and Searching Techniques.

Course Name: C218 (OBJECT ORIENTED PROGRAMMING LAB)

COURSE	COURSE OUTCOMES	
OBJECT ORIENTED PROGRAMMING LAB C218	C218.1	Develop simple C++ application programs using OOPs concepts

SEMESTER: 4 **COURSE YEAR: 2016-2017**

Course Name: C221 (OPERATING SYSTEMS)

COURSE	COURSE OUTCOMES	
OPERATING SYSYTEMS C221	C221.1	Analyze the services, structures and operations of various operating systems.
	C221.2	Identify the necessity of different process management and synchronization techniques.
	C221.3	Analyze the scenarios of memory hierarchy, allocation & de-allocation, virtual memory and segmentation concepts.
	C221.4	Design different solutions to the deadlock prevention, avoidance, detection, and recovery.
	C221.5	Formulate and Analyze various file handling, security, and disk scheduling mechanisms.

Course Name: C222 (COMPUTER ORGANIZATION)

COURSE	COURSE OUTCOMES	
COMPUTER ORGANIZATIO N C222	C222.1	To analyze the requirements of building blocks of a Computer.
	C222.2	To design Computer functional blocks using digital logic circuits.
	C222.3	To enhance the system performance by using suitable techniques.

Course Name: C223 (MICROPROCESSOR I)

COURSE	COURSE OUTCOMES	
MICROPROCE SSOR I C223	C223.1	Identify The architectural components of 8085 Microprocessor And their need.
	C223.2	Design of address decoding circuit for memory interface.
	C223.3	Solve Computational problems using 8085 assembly language programming.
	C223.4	Design serial and parallel interfaces for 8085 microprocessor
	C223.5	Design ADC and DAC interfaces for 8086 microprocessor.
	C223.6	Identify the architectural components of 8086 Microprocessor and their need.

Course Name: C224 (DATA COMMUNICATIONS)

COURSE	COURSE OUTCOMES	
DATA COMMUNICATIONS C224	C224.1	Apply network models and use network protocol architectures.
	C224.2	Distinguish various transmission impairments and transmission types.
	C224.3	Use various data encoding techniques to generate signals.
	C224.4	Apply flow control and error control techniques.
	C224.5	Identify data communication hardware and processing hardware for communication.
	C224.6	Distinguish various multiplexing techniques.

Course Name: C225 (ADVANCED DATA STRUCTURES)

COURSE	COURSE OUTCOMES	
ADVANCED DATA STRUCTURES C225	C225.1	Construct various types of tree structures for the given data.
	C225.2	Identify an appropriate collision resolution technique to handle collisions.
	C225.3	Implement priority queue with various heap models.
	C225.4	Apply various external sorting algorithms to large amount of data.
	C225.5	Apply Graph algorithms to solve network problems.
	C225.6	Analyze the operations of data structures using Amortized Analysis.

Course Name: C226 (OPERATIONS RESEARCH)

COURSE	COURSE OUTCOMES	
OPERATIONS RESEARCH C226	C226.1	Describe the basic Operations Research models, and formulate and solve Linear Programming problems
	C226.2	Formulate and solve engineering and managerial situations as Transportation and Assignment problems.
	C226.3	Determine the optimal solutions for various Job Sequencing and Replacement models. Describe and illustrate various Inventory models.
	C226.4	Discuss & schedule various project management problems by CPM & PERT. Understand Games theory and apply them to various competitive situations.

Course Name: C227 (ENVIRONMENTAL STUDIES)

COURSE	COURSE OUTCOMES	
ENVIRONMENTAL STUDIES C227	C227.1	Explain nature and classify the ecosystems
	C227.2	Categorize natural resources and analyse sustainable utilization of natural resources
	C227.3	Evaluate Resource pollution and over exploitation of land, water, air and catastrophic (events) impacts of climate change, global warming, ozone layer depletion, marine, radioactive pollution etc to inculcate the students about environmental awareness and safe transfer of our mother earth and its natural resources to the next generation
	C227.4	Formulate Constitutional provisions for the protection of natural resources

Course Name: C228 (OPERATING SYSYTEMS LAB)

COURSE	COURSE OUTCOMES	
OPERATING SYSYTEMS LAB C228	C228.1	Experiment with Unix commands, library functions and shell programming.
	C228.2	Build 'C' programs for process, memory management and deadlocks using system call

Course Name: C229 (DLD & MP LAB)

COURSE	COURSE OUTCOMES	
DLD & MP LAB C229	C229.1	Designing digital logic circuits using various gates and flip-flops
	C229.2	Problem solving using assembly language programming
	C229.3	Designing microprocessor interface circuits

SEMESTER: 5 **COURSE YEAR: 2017-2018**

Course Name: C311 (COMPUTER NETWORKS)

COURSE	COURSE OUTCOMES	
COMPUTER NETWORKS C311	C311.1	Analyze protocols and models of computer networks.
	C311.2	Analyze the important aspects and functions of medium access control (mac) layer, network layer, transport layer and application layer and examine their usage for internetworking.
	C311.3	Identify networking devices for various layers.
	C311.4	Apply networking principles for wireless Networks.

Course Name: C313 (WEB TECHNOLOGIES)

COURSE	COURSE OUTCOMES	
WEB TECHNOLOGIES C313	C313.1	Design static and dynamic WebPages using HTML, DHTML, CSS and JavaScript
	C313.2	Formulate proper XML SCHEMAS to the given problem
	C313.3	Develop web applications by integrating java and server-side scripting languages
	C313.4	Create PHP pages to handle form request/response from MYSQL database.
	C313.5	Design and develop real time web applications using various tools.

Course Name: C314 (FORMAL LANGUAGE AND AUTOMATA THEORY)

COURSE	COURSE OUTCOMES	
FORMAL LANGUAGE AND AUTOMATA THEORY C314	C314.1	Design FA, and output generating machines, Regular Expressions for regular languages, PDA for context free languages, Turing machines for accepting all languages and CFG for CFL's.
	C314.2	Construct DFA equivalent to NFA, NFA equivalent to RE, RE equivalent to DFA, CNF equivalent to CFG and GNF equivalent to CFG.
	C314.3	Simplify Regular expressions, DFA, Context Free Grammar.
	C314.4	Apply Pumping Lemma to determine whether certain languages are regular or not, certain languages are Context free or not

Course Name: C315 (DATABASE MANAGMENT SYSTEMS)

COURSE	COURSE OUTCOMES	
DATABASE MANAGMENT SYSTEMS C315	C315.1	Examine the features of DBMS and RDBMS.
	C315.2	To define, construct, manipulate and connect databases using formal and commercial query languages.
	C315.3	To design databases in conceptual and logical aspects.
	C315.4	To apply normalization to relational schema
	C315.5	To schedule concurrent transactions and Recover transactions.

Course Name: C316 (APPLICATION DEVELOPMENT USING JAVA)

COURSE	COURSE OUTCOMES	
APPLICATION DEVELOPMENT USING JAVA C316	C316.1	Analyze and identify principles, features, behaviour of Object Oriented programming paradigms/concepts in a real world scenario
	C316.2	Design web based applications with applet classes for creating UI
	C316.3	Design desktop/window based applications with different AWT components for creating look and feel applications.
	C316.4	Apply implementation knowledge to improve exposure in NIO, multitasking, multiprogramming and network programming

Course Name: C318 (DATABASE MANAGEMENT SYSTEM LAB)

COURSE	COURSE OUTCOMES	
DATABASE MANAGEMENT SYSTEM LAB C318	C318.1	Construct and practice SQL Queries for various operation on database
	C318.2	Design and implement a mini project for a given problem

Course Name: C319 (DATA COMMUNICATION & COMPUTER NETWORK LAB)

COURSE	COURSE OUTCOMES	
DATA COMMUNICATION & COMPUTER NETWORK LAB C319	C319.1	Develop client-server applications using the concepts of multithreading and socket API
	C319.2	Demonstrate client server communication, peer to peer communication, and telnet using windows 2003 client / server network, Windows XP peer to peer LAN, terminal network under LINUX environment with star topology

SEMESTER: 6 **COURSE YEAR: 2017-2018**

Course Name: C321 (DATA WAREHOUSING AND DATA MINING)

COURSE	COURSE OUTCOMES	
DATAWAREHOUSING AND DATA MINING C321	C321.1	Identify the importance and applications of Data Mining and able to interpret the data
	C321.2	Apply data pre-processing techniques on raw data to make it suitable for data mining
	C321.3	Formulate the concepts of data warehouse, OLAP technology and data cube technology
	C321.4	Formulate and apply association rule mining, classification, prediction and clustering algorithms and their respective performance evaluation metrics for different applications

Course Name: C322 (OBJECT ORIENTED SOFTWARE ENGINEERING)

COURSE	COURSE OUTCOMES	
OBJECT ORIENTED SOFTWARE ENGINEERING C322	C322.1	Explain software engineering concepts, development activities and various software process models.
	C322.2	Identify the various types of requirements elicitation and analyze them for the given problem.
	C322.3	Design UML diagrams for the given problem.
	C322.4	Select and use suitable design and architectural patterns for software design and architecture
	C322.5	Select appropriate testing strategies.
	C322.5	Apply various Software project Management techniques.

Course Name: C324 (DESIGN AND ANALYSIS OF ALGORITHMS)

COURSE	COURSE OUTCOMES	
DESIGN AND ANALYSIS OF ALGORITHMS C324	C324.1	Apply mathematical analysis methods to analyse the algorithm running times using asymptotic notations.
	C324.2	Compare different Data Structures for implementation of Algorithms and identify the effective Data Structure.
	C324.3	Analyse the complexities of various problems in different Algorithm design paradigms.
	C324.4	Design algorithms for computational problems and compare different algorithm methodologies.
	C324.5	Prepare approximate solutions for complex problems.

Course Name: C325 (COMPUTER GRAPHICS)

COURSE	COURSE OUTCOMES	
COMPUTER GRAPHICS C325	C325.1	Identify the basics of computer graphics, applications of computer graphics and different graphics systems devices.
	C325.2	Analyze algorithms and methods for scan converting graphics primitives
	C325.3	Apply geometric transformation for representing graphical objects
	C325.4	Apply viewing transformations to extract scene
	C325.5	Design graphics primitives using structural , hierarchical modelling and GUI

Course Name: C326 (COMPILER DESIGN)

COURSE	COURSE OUTCOMES	
COMPILER DESIGN C326	C326.1	Utilize the knowledge acquired in Finite automata, regular expressions, Grammars, Language processors, Structure of a compiler in designing a compiler.
	C326.2	Identify tokens by using Lexical analysis, data structures for symbol tables, runtime environment and error handling techniques.
	C326.3	Design a parse tree by using top-down and bottom-up parsing techniques.
	C326.4	Develop and optimize the intermediate code, machine code.

Course Name: C327 (CRYPTOGRAPHY AND NETWORK SECURITY)

COURSE	COURSE OUTCOMES	
CRYPTOGRAPHY AND NETWORK SECURITY C327	C327.1	Apply various cryptographic algorithms to ensure cryptographic principles.
	C327.2	Identify discrete types of malicious software, attacks and their countermeasures
	C327.3	Identify various software issues and their defending mechanisms
	C327.4	Analyze various network security protocols, standards and internet authentication applications

Course Name: C328 (SOFTWARE ENGINEERING MINI PROJECT LAB)

COURSE	COURSE OUTCOMES	
SOFTWARE ENGINEERING MINI PROJECT LAB C328	CSE 328.1	Design UML Diagrams using Rational Software.
	CSE 328.2	Develop software projects using software engineering activities.

Course Name: C329 (WEB TECHNOLOGIES LAB)

COURSE	COURSE OUTCOMES	
WEB TECHNOLOGIES LAB C329	C329.1	Design and develop real time web applications using various tools.

SEMESTER: 7 **COURSE YEAR: 2018-2019**

Course Name: C411 (EMBEDDED SYSTEMS)

COURSE	COURSE OUTCOMES	
EMBEDDED SYSTEMS C411	C411.1	Apply the knowledge of computer hardware and microcontrollers for solving Different problems.
	C411.2	Identify the interrupt latency concerns to reduce response time.
	C411.3	Analyze and Compare different Embedded Software Routines in real world applications.
	C411.4	Design Real time Embedded Systems using the concepts of RTOS.
	C411.5	Formulate the Embedded Development Tools to test embedded software.
	C411.6	Apply the knowledge of Basic IOT techniques and protocols to develop innovative applications.

Course Name: C412 (CYBER SECURITY AND DIGITAL FORENSICS)

COURSE	COURSE OUTCOMES	
CYBER SECURITY AND DIGITAL FORENSICS C412	C412.1	Use information security fundamentals and best practices.
	C412.2	Analyze the techniques, tools and processes used to penetrate networks, and the countermeasures that can be implemented to protect against these attack.
	C412.3	Apply various security protocols for web applications and discuss session hijacking
	C412.4	Analyze business risks arising from information security and privacy issues, as well as the creation and implementation of policies that ensure compliance with ethics, laws and industry standards.
	C412.5	Examines the role of the computer forensics investigator and explores the nature of the threat to organizations.

Course Name: C413 (ARTIFICIAL INTELLIGENCE)

COURSE	COURSE OUTCOMES	
ARTIFICIAL INTELLIGENCE C413	C413.1	Explain different AI problem characteristics, production system frame work and state space approach for solving AI problems, the state space representation for solving different AI Problems, natural language processing, planning and expert systems.
	C413.2	Demonstrate several optimal search strategies, use of Heuristics.
	C413.3	Analyze the problem as a state space graph and Apply Heuristics search techniques for solving AI problems, Apply monotonic , non monotonic & statistical reasoning to solve the problems.
	C413.4	Represent various real life problem domains using knowledge representation approaches like different knowledge representation approaches like relational, inferential, inheritable and procedural knowledge, semantic nets, CD, Scripts and Frames.
	C413.5	Infer new knowledge from the existing knowledge using deduction mechanism and resolution.

Course Name: C416 (BIGDATA ANALYTICS)

COURSE	COURSE OUTCOMES	
BIGDATA ANALYTICS C416	C416.1	Analyze characteristics of big data and its application areas.
	C416.2	Design HDFS and Map Reduce to store and process big data.
	C416.3	Apply advanced map reduce applications on big data.

Course Name: C417 (KNOWLEDGE ENGINEERING LAB)

COURSE	COURSE OUTCOMES	
KNOWLEDGE ENGINEERING LAB C417	C417.1	Ability to implement statistical operations on distinct datasets in R environment.
	C417.2	Ability to apply data mining algorithms on different datasets to solve real world problems using WEKA Tool .

Course Name: C418 (BIG DATA ANALYTICS LAB)

COURSE	COURSE OUTCOMES	
BIG DATA ANALYTICS LAB C418	C418.1	Create a hadoop environment.
	C418.2	Develop a solution for a given p[problem using map reduce.

Course Name: C419 (IOT LAB)

COURSE	COURSE OUTCOMES	
IOT LAB C419	C419.1	Ability to develop IoT based solutions by applying engineering knowledge for solving real world problems.
	C419.2	Ability to apply modern IoT tools for real test bed experiments for IOT, habitat monitoring.

SEMESTER: 8 **COURSE YEAR: 2018-2019**

Course Name: C421 (PROJECT)

COURSE	COURSE OUTCOMES	
PROJECT C421	C421.1	Apply various software engineering techniques.
	C421.2	Analyze software requirements.
	C421.3	Design and implement various components of the software systems using various tools.
	C421.4	Communicate with team members.
	C421.5	To investigate and develop software's to solve multi disciplinary problems.
	C421.6	Plan and Manage project development activities.