INDIRA COLLEGE OF ENGINEERING AND MANAGEMENT

Approved By AICTE New Delhi, DTE (MS) and Affiliated to Pune University

ACADEMIC YEAR 2021-22

COURSE OUTCOMES

SE(COMPUTER)(2019 Pat.)				
YEAR	**COURSE CODE**	**COURSE NAME**	**JRSE OUTCOME**	**COURSE OUTCOMES**
SE (SEM-III, TERM-I)	210241	Discrete Mathematics	210241.1	Formulate problems precisely, solve the problems, apply formal proof techniques, and explain the reasoning clearly.
			210241.2	Apply appropriate mathematical concepts and skills to solve problems in both familiar and unfamiliar situations including those in real-life contexts.
			210241.3	Design and analyze real world engineering problems by applying set theory, propositional logic and to construct proofs using mathematical induction.
			210241.4	Specify, manipulate and apply equivalence relations; construct and use functions and apply these concepts to solve new problems.
			210241.5	Calculate numbers of possible outcomes using permutations and combinations; to model and analyze computational processes using combinatorics.
			210241.6	Model and solve computing problem using tree and graph and solve problems using appropriate algorithms.
			210241.7	Analyze the properties of binary operations, apply abstract algebra in coding theory and evaluate the algebraic structures.
	210242	Fundamentals of Data Structures	210242.1	Design and algorithms to solve the programming problems,identify appropriate algorithmic strategy for specific application, and analyze the time and space complexity.
			210242.2	Discriminate the usage of various structures, Design/Program/Implement the appropriate data structures;use them in implementations of abstract data types and identify the appropriate data structure in approaching the problem solution.
			210242.3	Demonstrate use of sequential data structures- Array and Linked lists to store and process data.
			210242.4	Understand the computational efficiency of the principal algorithms for searching and sorting and choose the most efficient one for the application.
			210242.5	Compare and constrast different implementations of data structures(dynamic and static).
			210242.6	Understand, Implement and apply principles of data structures-stack and queue to solve computational problems.
	210243	Object Oriented Programming(OOP)	210243.1	Apply constructs- sequence, selection and iteration; classes and objects, inheritance, use of predefined classes from libraries while developing software.
			210243.2	Design object-oriented solutions for small systems involving multiple objects.
			210243.3	Use virtual and pure virtual function and complex programming situations.
			210243.4	Apply object-oriented software principles in problem solving.
			210243.5	Analyze the strengths of object-oriented programming.
			210243.6	Develop the application using object oriented programming language(C++).

210244	Computer Graphics	210244.1	Identify the basic terminologies of Computer Graphics and interpret the mathematical foundation of the concepts of computer graphics.
		210244.2	Apply mathematics to develop Computer programs for elementary graphic operations.
		210244.3	Illustrate the concepts of windowing and clipping and apply various algorithms to fill and clip polygons.
		210244.4	Understand and apply the core concepts of computer graphics, including transformation in two and three dimensions, viewing and projection.
		210244.5	Understand the concepts of color models, lighting, shading models and hidden surface elimination.
		210244.6	Create effective programs using concepts of curves, fractals, animation and gaming.
210245	Digital Electronics & Logic Design	210245.1	Simplify Boolean Expression using K Map
		210245.2	Design and implement Combinational circuits
		210245.3	Design and implement Sequential circuits
		210245.4	Develop Simple real world application using ASM and PLD
		210245.5	Differentiate and choose appropriate logic families IC Packages as per the given design specification
		210245.6	Explain organization and architecture of computer system.
210246	Data Structures Laboratory	210246.1	Use algorithms on various linear data structure using sequential organization to solve real life problems.
		210246.2	Analyze problems to apply suitable searching and sorting algorith to various applications.
		210246.3	Analyze problems to use variants of linked list and solve various real life problems.
		210246.4	Designing and implement data structures and algorithms for solving different kinds of problems.
210247	OOP and Computer Graphics Laboratory	210247.1	Understand and apply the concepts like inheritance, polymorphism, exception handling and generic structures for implementing reusable programming codes.
		210247.2	Analyze the concept of file and apply it while storing and retrieving the data from secondary storages.
		210247.3	Analyze and apply computer graphics algorithms for line-circle drawing, scan conversion and filling with the help of object oriented programming concepts.
		210247.4	Understand the concept of windowing and clipping and apply various algorithms to fill and clip polygons.
		210247.5	Apply logic to implement, curves, fractals, animation and gaming programs.
210248	Digital Electronics Laboratory	210248.1	Understand the working of digital electronic circuits
		210248.2	Apply the knowledge to appropriate IC as per the design specifications
		210248.3	Design and implement Sequential and Combinational digital circuits as per the specifications
210249	Business Communication Skills	210249.1	Express effectively through verbal/oral communications and improve listening skills.
		210249.2	Write precise briefs or reports and technical documents.
		210249.3	Prepare for group discussions / meetings / interviews and presentations.
		210249.4	Explore goal / target setting, self motivation and practicing creative thinking.

		Skills	210249.5	Operate effectively in multidisciplinery and heterogeneous teams through the knowledge of team work, interpersonal relationships, conflict management and leadership qualities.
	210250	Humanity and Social Science	210250.1	Aware of the various issues concerning humans and society.
			210250.2	Aware about their responsibilities towards society.
			210250.3	Sensitized about broader issues regarding the social, cultural, economic and human aspects, involved in social changes.
			210250.4	Able to understand the nature of the individual and the relationship between self and the community.
			210250.5	Able to understand major ideas, values, beliefs, and experiences that have shaped human history and cultures.
	210251	AC3-I: Green Construction and Design	210251.1	Understand the importance of environment friendly society.
			210252.2	Apply primary measures to reduce carbon emissions from their surroundings.
			210253.3	Learn role of IT solutions in design of green buildings.
			210254.4	Understand the use of software systems to complete statutory compliances involved in the
		AC3-II: Social Awareness and Governance Program	210251.1	Understand social issues and responsibilities as member of society.
			210252.2	Apply social values and ethics in decision making at social or organizational level
			210253.3	Promote obstacles in national integration and role of youth for National Integration
			210254.4	Demonstrate basic features of Indian Constitution.
		AC3-III: Environmental Studies	210251.1	Comprehend the importance of ecosystem and biodiversity
			210252.2	Correlate the human population growth and its trend to the environmental degradation and develop the awareness about his/her role towards environmental protection and prevent
			210253.3	Identify different types of environmental pollution and control measures
			210254.4	Correlate the exploitation and utilization of conventional and non-conventional resources
		AC3-IV: Smart Cities	210251.1	Understand the dynamic behavior of the urban system by going beyond the physical appearance and by focusing on representations, properties and impact factors
			210252.2	Explore the city as the most complex human-made organism with a metabolism that can be modeled in terms of stocks and flows
			210253.3	Knowledge about data-informed approaches for the development of the future city, based on crowd sourcing and sensing
			210254.4	Knowledge about the latest research results in for the development and management of future cities
SE (SEM-IV, TERM-II)	207003	Engineering Mathematics III	207003.1	Solve Linear differential equations, essential in modelling and design of computer-based systems.
			207003.2	Apply concept of Fourier transform and Z-transform and its applications to continuous and discrete systems and image processing.
			207003.3	Apply Statistical methods like correlation and regression analysis and probability theory for data analysis and predictions in machine learning.

		207003.4	Solve Algebraic and Transcendental equations and System of linear equations using numerical techniques.
		207003.5	Obtain Interpolating polynomials, numerical differentiation and integration, numerical solutions of ordinary differential equations used in modern scientific computing.
210252	Data Structures and Algorithms	210252.1	Identify and articulate the complexity goals and benefits of a good hashing scheme for real world applications.
		210252.2	Apply non-linear data structures for solving problems of various domain.
		210252.3	Design and specify the operations of a nonlinear-based abstract data type and implement them in a high-level programming language.
		210252.4	Analyaze the algorithmic solutions for resource requirements and optimization.
		210252.5	Use efficient indexing methods and multiway search techniques to store and maintain data.
		210252.6	Use appropriate modern tools to understand and analyze the functionalities confined to the secondary storage.
210253	Software Engineering	210253.1	Analyze software requirements and formulate design solution for a software.
		210253.2	Design applicable solutions in one or more application domains using software engineering approaches that integrate ethical, social, legal and economic concerns.
		210253.3	Apply new software models, techniques and technologies to bring out innovative and novelistic solutions for the growth of the society in all aspects and evolving into their continuous professional development.
		210253.4	Model and design User interface and component-level.
		210253.5	Identify and handle risk management and software configuration management.
		210253.6	Utilize knowledge of software testing approaches, approaches to verification and validation.
		210253.7	Construct software of high quality – software that is reliable, and that is reasonably easy to understand, modify and maintain efficient, reliable, robust and cost-effective software solutions.
210254	Microprocessor	210254.1	Exhibit skill of assembly language programming for the application
		210254.2	Classify Processor architectures.
		210254.3	Illustrate advanced features of 80386 Microprocessor.
		210254.4	Compare and contrast different processor modes.
		210254.5	Use interrupts mechanism in applications
		210254.6	Differentiate between Microprocessors and Microcontrollers.
		210254.7	Identify and analyze the tools and techniques used to design, implement, and debug microprocessor-based systems.
210255	Principles of Programming Languages	210255.1	Make use of basic principles of programming languages.
		210255.2	Develop a program with Data representation and Computations.
		210255.3	Develop programs using Object Oriented Programming language : Java.
		210255.4	Develop application using inheritance, encapsulation, and polymorphism
		210255.5	Demonstrate Multithreading for robust application development.
		210255.6	Develop a simple program using basic concepts of Functional and Logical programming paradigm.

210256	Data Structures and Algorithms Laboratory	210256.1	Understand the ADT/libraries, hash tables and dictionary to design algorithms for a specific problem.
		210256.2	Choose most appropriate data structures and apply algorithms for graphical solutions of the problems.
		210256.3	Apply and analyze non linear data structures to solve real world complex problems.
		210256.4	Apply and analyze algorithm design techniques for indexing, sorting, multi-way searching, file organization and compression.
		210256.5	Analyze the efficiency of most appropriate data structure for creating efficient
210257	Microprocessor Laboratory	210257.1	Understand and apply various addressing modes and instruction set to implement assembly language programs
		210257.2	Apply logic to implement code conversion
		210257.3	Analyze and apply logic to demonstrate processor mode of operation
210258	Project Based Learning II	210258.1	Identify the real life problem from societal need point of view
		210258.2	Choose and compare alternative approaches to select most feasible one
		210258.3	Analyze and synthesize the identified problem from technological perspective
		210258.4	Design the reliable and scalable solution to meet challenges
		210258.5	Evaluate the solution based on the criteria specified
		210258.6	Inculcate long life learning attitude towards the societal problems
210259	Code of Conduct	210259.1	Understandthe basic perception of profession, professional ethics, various moral and social issues, industrial standards, code of ethics and role of professional ethics in engineering field.
		210259.2	Awareof professional rights and responsibilities of an engineer, responsibilities of an engineer for safety and risk benefit analysis.
		210259.3	Understandthe impact of the professional Engineering solutions in societal and Environmental contexts, and demonstrate the knowledge of, and need for sustainable development
		210259.4	Acquireknowledge about various roles of engineers in variety of global issues and able to apply ethical principles to resolve situations that arise in their professional lives
210260	AC4-I: Water Management	210260.1	Understand the global water cycle and its various processes
		210260.2	Understand climate change and their effects on water systems
		210260.3	Understand Drinking treatment and quality of groundwater and surface water
		210260.4	Understand the Physical, chemical, and biological processes involved in water treatment and distribution.
	AC4-II: Intellectual Property Rights and Patents	210260.1	Understand the fundamental legal principles related to confidential information, copyright, patents, designs, trademarks and unfair competition
		210260.2	Identify, apply and assess principles of law relating to each of these areas of intellectual property
		210260.3	Apply the appropriate ownership rules to intellectual property you have been involved in creating

		AC4-III: The Science of Happiness	210260.1	Understand what happiness is and why it matters to you
			210260.2	Learn how to increase your own happiness
			210260.3	Understand of the power of social connections and the science of empathy
			210260.4	Understand what is mindfulness and its real world applications
		AC4-IV: Yoga and Meditation	210260.1	Understand philosophy and religion as well as daily life issues will be challenged and enhanced.
			210260.2	Enhances the immune system.
			210260.3	Intellectual and philosophical understanding of the theory of yoga and basic related Hindu scriptures will be developed.
			210260.4	Powers of concentration, focus, and awareness will be heightened.

TE(COMPUTER)(2019 Pat.)

YEAR	COURSE CODE	COURSE NAME	JRSE OUTCOME	COURSE OUTCOMES
TE (SEM-V,TERM-I)	310241	Database Management System	310241.1	Analyze and design Database sysem using ER model
			310241.2	Implement database queries using database language
			310241.3	Normalize the database design using normal forms
			310241.4	Apply transaction management concept in real time situation
			310241.5	Use NOSQL database for processing unstructured data
			310241.6	Differentiate between complex datatypes and analyze the use of appropriate data types
	310242	Theory of Computation	310242.1	To Understand formal language, translation logic, essentials of translation, alphabets, language representation and apply it to design Finite Automata and its variants
			310242.2	To Construct regular expression to present regular language and understand pumping lemma
			310242.3	To Design Context Free Grammars and learn to simplify the grammar
			310242.4	To Construct Pushdown Automaton model for the Context Free Language
			310242.5	To Devise Turing Machine for the different requirements outlined by theoretical computer science
			310242.6	To Analyze different classes of problems, and study concepts of NP completeness
	310243	Systems Programming and Operating System	310243.1	Analyze and synthesize basic System Software and its functionality.
			310243.2	Identify suitable data structures and Design & Implement various System Software
			310243.3	Compare different loading schemes and analyze the performance of linker and loader
			310243.4	Implement and Analyze the performance of process scheduling algorithms
			310243.5	Identify the mechanism to deal with deadlock and concurrency issues
			310243.6	Demonstrate memory organization and memory management policies
	310244	Computer Networks and Security	310244.1	Summarize fundamental concepts of Computer Networks, architectures, protocols and technologies
			310244.2	Illustrate the working and functions of data link layer
			310244.3	Analyze the working of different routing protocols and mechanisms
			310244.4	Implement client-server applications using sockets
			310244.5	Illustrate role of application layer with its protocols, client-server architectures
			310244.6	Comprehend the basics of Network Security

310245	310245(A): Internet of Things and Embedded Systems	310245(A).1	Understand the fundamentals and need of Embedded Systems for the Internet of Things
		310245(A).2	Apply IoT enabling technologies for developing IoT systems
		310245(A).3	Apply design methodology for designing and implementing IoT applications
		310245(A).4	Analyze IoT protocols for making IoT devices communication
		310245(A).5	Design cloud based IoT systems
		310245(A).6	Design and Develop secured IoT applications
	310245(D): Software Project Management	310245(D).1	Comprehend Project Management Concepts
		310245(D).2	Use various tools of Software Project Management
		310245(D).3	Schedule various activities in software projects
		310245(D).4	Track a project and manage changes
		310245(D).5	Apply Agile Project Management
		310245(D).6	Analyse staffing process for team building and decision making in Software Projects and Management
310246	Database Management System Lab	310246.1	Design ER model for given requirements and convert it into database tables
		310246.2	Design schema in appropriate normal form considering actual requirements
		310246.3	Implement SQL queries for given requirement using different SQL concepts
		310246.4	Implement PL/SQL code block for given requirements
		310246.5	Implement NOSQL queries using MONGO DB
		310246.6	Design and Develop application considering actual requirement and using database concepts
310247	Computer Networks and Security Laboratory	310247.1	Analyze the requirements of network types, topology and transmission media
		310247.2	Demonstrate error control, flow control techniques and protocols and analyze them
		310247.3	Demonstrate the subnet formation with IP allocation mechanism and apply various routing algorithms
		310247.4	Develop Client-Server architectures and prototypes
		310247.5	Implement web applications and services using application layer protocols
		310247.6	Use network security services and mechanisms
310248	Laboratory Practice I	310248.1	Implement language translators
		310248.2	Use tools like LEX and YACC
		310248.3	Implement internals and functionalities of Operating System
		310248.4	Design IoT and Embedded Systems based application, Apply Software Project Management tools
		310248.5	Develop smart applications using IoT, Implement software project planning and scheduling
		310248.6	Develop IoT applications based on cloud environment, Analyse staffing in software project
310249	Seminar and Technical Communication	310249.1	Analyze a latesttopic of professional interest
		310249.2	Enhancetechnical writing skills
		310249.3	Identify an engineering problem, analyze it and propose a work plan to solve it
		310249.4	Communicate with professional technical presentation skills
	Audit Course 5-	310250(B).1	Summarize the principles of proper courtesy as they are practiced in the workplace.
		310250(B).2	Apply proper courtesy in different professional situations.

	310250(B)	Professional Ethics and Etiquettes	310250(B).3	Practice and apply appropriate etiquettes in the working environment and day to day life.
			310250(B).4	Build proper practices personal and business communications of Ethics and Etiquettes
TE (SEM-VI,TERM-II)	310251	Data Science and Big Data Analytics	310251.1	Analyze needs and challenges for Data Science Big Data Analytics
			310251.2	Apply statistics for Big Data Analytics
			310251.3	Apply the lifecycle of Big Data analytics to real world problems
			310251.4	Implement Big Data Analytics using Python programming
			310251.5	Implement data visualization using visualization tools in Python programming
			310251.6	Design and implement Big Databases using the Hadoop ecosystem
	310252	Web Technology	310252.1	Implement and analyze behavior of web pages using HTML and CSS
			310252.2	Apply the client side technologies for web development
			310252.3	Analyze the concepts of Servlet and JSP
			310252.4	Analyze the Web services and frameworks
			310252.5	Apply the server side technologies for web development
			310252.6	Create the effective web applications for business functionalities using latest web development platforms
	310253	Artificial Intelligence	310253.1	To Identify and apply suitable Intelligent agents for various AI applications
			310253.2	To Build smart system using different informed search / uninformed search or heuristic approaches
			310253.3	To Identify knowledge associated and represent it by ontological engineering to plan a strategy to solve given problem
			310253.4	To Apply the suitable algorithms to solve AI problems
			310253.5	To Implement ideas underlying modern logical inference systems
			310253.6	To Represent complex problems with expressive yet carefully constrained language of representation
	310254(C)	Cloud Computing	310254(C).1	Understand the different Cloud Computing environment
			310254(C).2	Use appropriate data storage technique on Cloud, based on Cloud application
			310254(C).3	Analyze virtualization technology and install virtualization software
			310254(C).4	Develop and deploy applications on Cloud
			310254(C).5	Apply security in cloud applications
			310254(C).6	Use advance techniques in Cloud Computing
	310255	Internship	310255.1	To demonstrate professional competence through industry internship.
			310255.2	To apply knowledge gained through internships to complete academic activities in a professional manner.
			310255.3	To choose appropriate technology and tools to solve given problem.
			310255.4	To demonstrate abilities of a responsible professional and use ethical practices in day to day life.
			310255.5	To Create network and social circle, and developing relationships with industry people.
			310255.6	To analyze various career opportunities and decide carrier goals
	310256	Data Science and Big Data Analytics Laboratory	310256.1	Apply principles of Data Science for the analysis of real time problems
			310256.2	Implement data representation using statistical methods
			310256.3	Implement and evaluate data analytics algorithms
			310256.4	Perform text preprocessing

			310256.5	Implement data visualization techniques
			310256.6	Use cutting edge tools and technologies to analyze Big Data
	310257	Web Technology Laboratory	310257.1	Understand the importance of website planning and website design issues
			310257.2	Apply the client side and server side technologies for web application development
			310257.3	Analyze the web technology languages, frameworks and services
			310257.4	Create three tier web based applications
	310258	Lab Practice II	310258.1	To Design a system using different informed search / uninformed search or heuristic approaches
			310258.2	To Apply basic principles of AI in solutions that require problem solving, inference, perception, knowledge representation, and learning
			310258.3	To Design and develop an interactive AI application
	310259(A)	Audit Course 6-Digital and Social Media Marketing	310259(A).1	Understand the fundamentals and importance of digital marketing
			310259(A).2	Use the power of social media for business marketing
			310259(A).3	Analyze the effectiveness of digital marketing and social media over traditional
	310503	Statistics and Machine Learning(Honours in Data Science)	310503.1	Apply appropriate statistical measure for machine learning applications
			310503.2	Usage of appropriate descriptive statisticsmeasures forstatistical analysis
			310503.3	Usage of appropriate statistics inference for data analysis
			310503.4	Identify types ofsuitable machine learning techniques
			310503.5	Apply regression techniques to machine learning problems
			310503.6	Apply decision tree and Naïve Bayes modelto solve real time applications

BE(COMPUTER)(2015 Pat.)

YEAR	COURSE CODE	COURSE NAME	JRSE OUTCOME	COURSE OUTCOMES
BE(SEM-VII,TERM-I)	410241	High Performance Computing	410241.1	Describe different parallel architectures, inter-connect networks, programming models
			410241.2	Develop an efficient parallel algorithm to solve given problem
			410241.3	Analyze and measure performance of modern parallel computing systems
			410241.4	Build the logic to parallelize the programming task
	410242	Artificial Intelligence and Robotics	410242.1	Identify and apply suitable Intelligent agents for various AI applications
			410242.2	Design smart system using different informed search / uninformed search or heuristic approaches.
			410242.3	Identify knowledge associated and represent it by ontological engineering to plan a strategy to solve given problem.
			410242.4	Apply the suitable algorithms to solve AI problems
	410243	Data Analytics	410243.1	Write case studies in Business Analytic and Intelligence using mathematical models
			410243.2	Present a survey on applications for Business Analytic and Intelligence
			410243.3	Provide problem solutions for multi-core or distributed, concurrent/Parallel environments
	lective I-410244(C	Pervasive and Ubiquitous Computing	410444A.1	1.To perform image processing programming
			410444A.2	2.To solve Image Processing problems using multi-core or distributed, concurrent/Parallel environments
	lective I-410244(D	Data Mining and Warehousing	410244D.1	Apply basic, intermediate and advanced techniques to mine the data
			410244D.2	Analyze the output generated by the process of data mining
			410244D.3	Explore the hidden patterns in the data
			410244D.4	Optimize the mining process by choosing best data mining technique

	lective II-410245(E	Software Testing and Quality Assurance	410245(B).1	Describe fundamental concepts in software testing such as manual testing, automation testing and
			410245(B).2	Design and develop project test plan, design test cases, test data, and conduct test operations
			410245(B).3	Apply recent automation tool for various software testing for testing software
			410245(B).4	Apply different approaches of quality management, assurance, and quality standard to software
			410245(B).5	Apply and analyze effectiveness Software Quality Tools
	410246	Laboratory Practice I	410246.1	Practical hands on is the absolute necessity as far as employability of the learner is concerned.
			410246.2	The presented course is solely intended to enhance the competency by undertaking the laboratory assignments of the core courses
	410247	Laboratory Practice II	410247.1	Practical hands on is the absolute necessity as far as employability of the learner is concerned
			410247.2	The presented course is solely intended to enhance the competency by undertaking the laboratory assignments of the core courses. Enough choice is provided to the learner to choose an elective of one‟s interest.
	410248	Project Work Stage I	410248.1	Solve real life problems by applying knowledge.
			410248.2	Analyze alternative approaches, apply and use most appropriate one for feasible solution.
			410248.3	Write precise reports and technical documents in a nutshell.
			410248.4	Participate effectively in multi-disciplinary and heterogeneous teams exhibiting team work, Inter-personal relationships, conflict management and leadership quality.
	410249	410249: Audit Course 5-AC5 – V: Emotional Intelligence	410249.1	Expand your knowledge of emotional patterns in yourself and others
			410249.2	Discover how you can manage your emotions, and positively influence yourself and others
			410249.3	Build more effective relationships with people at work and at home
			410249.4	Positively influence and motivate colleagues, team members, managers
			410249.5	Increase the leadership effectiveness by creating an atmosphere that engages others
BE(SEM-VIII,TERM-II)	410250	Machine Learning	410250.1	Distinguish different learning based applications
			410250.2	To design and model using UML for a given software system
			410250.3	Apply different preprocessing methods to prepare training data set for machine learning.
			410250.4	Design and implement supervised and unsupervised machine learning algorithm.
			410250.5	Implement different learning models
			410250.6	Learn Meta classifiers and deep learning concepts
	410251	Information and Cyber Security	410251.1	Gauge the security protections and limitations provided by today's technology.
			410251.2	Identify information security and cyber security threats.
			410251.3	Analyze threats in order to protect or defend it in cyberspace from cyber-attacks.

			410251.4	Build appropriate security solutions against cyber-attacks.
	Elective III-410252(C)	Embedded and Real Time Operating Systems	410252C.1	Recognize and classify embedded and real-time systems
			410252C.2	Explain communication bus protocols used for embedded and real-time systems
			410252C.3	Classify and exemplify scheduling algorithms
			410252C.4	Apply software development process to a given RTOS application
			410252C.5	Design a given RTOS based application
	Elective III-410252(D)	Soft Computing and Optimization Algorithms	410252D.1	Apply soft computing methodologies, including artificial neural networks, fuzzy sets, fuzzy logic, fuzzy inference systems and genetic algorithms
			410252D.2	Design and development of certain scientific and commercial application using computational neural network models, fuzzy models, fuzzy clustering applications and genetic algorithms in specified applications
	lective IV-410253(	Human Computer Interface	410253B.1	Evaluate the basics of human and computational abilities and limitations.
			410253B.2	Inculcate basic theory, tools and techniques in HCI.
			410253B.3	Apply the fundamental aspects of designing and evaluating interfaces.
			410253B.4	Apply appropriate HCI techniques to design systems that are usable by people
	410253(C)	Cloud Computing	410253C.1	To install cloud computing environments.
			410253C.2	To develop any one type of cloud
			410253C.3	To explore future trends of cloud computing
	410254	Laboratory Practice III	410254.1	Practical hands on is the absolute necessity as far as employability of the learner is concerned.
			410254.2	The presented course is solely intended to enhance the competency by undertaking the laboratory assignments of the core courses
	410255	Laboratory Practice IV	410255.1	Practical hands on is the absolute necessity as far as employability of the learner is concerned.
			410255.2	The presented course is solely intended to enhance the competency by undertaking the laboratory assignments of the elective courses. Enough choice is provided to the learner to choose an elective of one‟s interest
	410256	Project Work Stage II	410455.1	Show evidence of independent investigation
			410455.2	Critically analyze the results and their interpretation.
			410455.3	Report and present the original results in an orderly way and placing the open questions in the right perspective.
			410455.4	Link techniques and results from literature as well as actual research and future research lines with the research.
			410455.5	Appreciate practical implications and constraints of the specialist subject
	410257	Audit Course 6 AC6 – I: Business Intelligence	410257.1	Apply the concepts of Business Intelligence in real world applications
			410257.2	Explore and use the data warehousing wherever necessary
			410257.3	Design and manage practical BI systems