	Course Outcome (COs) of CSE Department   Year of study: 2018-19
	Department of Computer Science & Engineering
1FY105	Human Values Year of study: 2018-19
CO12FY105.1	Students will understand the importance of happiness through identification of human values and skills.
CO12FY105.2	Students will understand the role of basic human aspirations in self and people around them.
CO12FY105.3	foundational value of relationship
CO12FY105.4	Students will understand the interconnectedness among the four orders of nature, recyclability, coexistance and harmony at all level of existence
CO12FY105.5	Students will undertand to be prepared for humanistic education, professional competence with ethics and humanistic universal order.
1FY201	Engineering Mathematics-I Year of study: 2018-19
CO11FY201.1	Students will be able to evaluate volume and surface area of the solid formed by revolution of different curves. Also calculate definite integral through Beta and Gamma functions.
CO11FY201.2	Students will be able to classify the concept of sequence, monotonic sequence, Cauchy's sequence and infinite series. Also apply various methods to test convergence and divergence of sequence and infinite series.
CO11FY201.3	Learner will be able to identify to express a function in term of a series of sine and cosine.
CO11FY201.4	Students will be able to evaluate maxima and minima of multivariable functions using the concept of partial differentiation. Also understand the concept of limit, continuity and differentiability of two variable function
CO11FY201.5	Students will be able to evaluate double and triple integration and to apply the knowledge to determine area, volume, centre of mass and centre of gravity. Further understand vector differentiation and vector integration.
1FY203	Engineering Chemistry Year of study: 2018-19 Differentiation between hard and soft water solve the related numerical problems on water treatment; and its application in inductrios
CO12FY203.1	and daily life
CO12FY203.2	Comprehension of various types of fuel, instrumental techniques for analysis and solve the numerical problems related to it
CO12FY203.3	Identification of corrosion and application of its knowledge to protect the metal
CO12FY203.4	beveloping basic knowledge of inorganic Engineering materials viz. cement, glass, lubricants .
01211203.5	
1FY306	Programming for Problem Solving Year of study: 2018-19
CO11FY306.1	Students will be able to write algorithms and draw flowcharts for various problems, using components of flowcharts.
CO11FY306.2	Students will be able to describe architecture of computer and solve number system problems.
CO11FY306.3	Students will be able to memorize different data types and operators in C and to write ,compile and debug programs in C language, using the compiler.
CO11FY306.4	Students will be able to design flow charts and write programs with multiple instructions, involving decision structures and loops in C on any 64 bit compiler.
CO11FY306.5	Students will be able to design flow chart and write programs involving functions and to handle file reading writing operations using any 64 bit compiler.
1FV308	Basic Electrical Engineering Year of study: 2018-19
CO11FY308.1	Arragne and reconstruct for solving circuit with different kind of methods and theorems
CO11FY308.2	Summarize and explain the behaviors of basic electrical elements like resistor, inductor and capacitor.
CO11FY308.3	Categorize and formulate the behaviors of transformer.
CO11FY308.4	Explain behaviors, Categorize and relate the concept of AC and DC machines.
CO11FY308.5	Assemble electronics components in the circuit after formulate its properties. Summarize and relate the behavior of LT switchgear, earthing and electrical power measurement
2FY201	Engineering Mathematics-II Year of study: 2018-19 Students will be able to understand the concent of mathematicity observatoristic constants. Such as the second state of the second state
CO12FY201.1	Students will be able to understand the concept of rank of matrix, infracteristic equation & characteristic roots & use the applicability of Caylay Hamilton Theorem to find inverse of matrix which is very important in many engineering application.
CO12FY201.2	Students understand various methods to solve ordinary differential equation of first and Higher order. Which place important role in all branches of Engineering
CO12FY201.3	Students will be able to know various methods to solve ordinary differential equation of second order with variable coefficient which is useful for solving the practical problems which arise in the industry.
CO12FY201.4	Students identify the concept of PDE, including formation and solution of linear and non linear PDE. Also understand about Lagrange's method, standard forms of PDE to solve PDE.
CO12FY201.5	Students will be able to classify second order PDE including the solution of one dimensional equation by method of separation of variables with boundary condition.
2FY202	Engineering Physics Year of study: 2018-19
CO11FY202.1	Apply and operate on the concept of interference and diffraction to explain various wave optical phenomena
CO11FY202.2	To describe the concept of quantum mechanics and apply the knowledge to 1D and 3D potential box problem
CO11EV202.2	Application of coherence in the source of light and basics of optical fiber: employment of working principle and construction of lasers:
COTTET202.3	demonstration of optical waveguides
CO11FY202.4	Application of physics of semiconductors material and their classifications

COTTFY202.5	Breakdown of electromagnetism with the help of Maxwell's equations and formulate the electromagnetic energy transformation theorem
2FY104	Communication Skills Year of study: 2018-19
CO11FY104.1	Students will be able to understand and develop communication skills and techniques which will felicitate their ability to work collaboratively with others
CO11FY104.2	Students will be able to use English grammar accurately that will increase their confidence in English writing and speaking.
CO11FY104 3	Students will be able to invent draft organize abstract elaborate and synthesize their own and other's ideas in formatted way
CO11EV104.4	Students will be able to understand literary devices after reading noems and stories and also appreciate art in all forms
01111104.4	Students will be able to understand interary devices after reading poents and stories and also appreciate art in all forms.
257207	Paris Machanical Engineering Veer of study 2019-10
261307	Basic Mechanical Engineering fear of study. 2010-19
CO12FY307.1	and power plants.
CO12FY307.2	Students will be able to conclude basics of centrifugal, reciprocation pumps and Internal Combustion Engine. Students will be able to conclude basics of centrifugal, reciprocation pumps and Internal Combustion Engine. Students will be able to conclude basics of centrifugal, reciprocation pumps and Internal Combustion Engine.
C012EV307 3	Students will be able to analyze basics of different types nower transision systems such as belt, rone, gears and gear trains
CO12FY307.4	Students will be able to illustrate working of different manufacturing processes
CO12EV207.5	Students will be able to identify different engineering materials their properties and various types of heat treatment processes
01211307.5	Students will be able to identify different engineering materials their, properties and various types of fleat treatment processes
251/200	
2FY309	Basic Civil Engineering Year of study: 2018-19
CO12FY309.1	Students will be able to describe and write the Role of civil engineer and impact of infrastructure on society.
CO12FY309.2	Students will be able to write & outline the Principles of surveying and leveling will be known to student.
CO12FY309.3	Student will be able to analyze types of foundation and parts of building
CO12FY309.4	Students will be able to classify the Importance of traffic engineering will be known to students.
CO12FY309.5	Students will be able to express and review about problem related to environment.
3CS201	Advanced Engineering mathematics Year of study: 2018-19
CO23201.1	To learn the concepts and principles of Random variable and Probability distribution
CO23201.2	Students are able to apply different probability distribution to identify and solve real life problem.
CO23201.3	To learn the formulation of different mathematical problems into optimization Problems and application in Engineering field.
CO23201.4	Apply the principles of optimization using differential calculus
	Student able to formulate real life problem into linear programming problem, transportation and assignment problem. Get the best
CO23201.5	solution which helps them in many areas.
3CS102	Technical Communication Year of study: 2018-19
<b>3CS102</b> CO23102.1	Technical Communication Year of study: 2018-19 Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task
<b>3CS102</b> CO23102.1 CO23102.2	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing
<b>3CS102</b> CO23102.1 CO23102.2 CO23102.3	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues and problems involved in writing about technology and in workplace writing.
3CS102 CO23102.1 CO23102.2 CO23102.3 CO23102.4	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and appreciation
<b>3CS102</b> C023102.1 C023102.2 C023102.3 C023102.4	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to press themselves better in technical writing by understanding the concent style and methodology used in
3CS102 CO23102.1 CO23102.2 CO23102.3 CO23102.4 CO23102.5	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.
3CS102           CO23102.1           CO23102.2           CO23102.3           CO23102.4           CO23102.5	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.
3CS102 CO23102.1 CO23102.2 CO23102.3 CO23102.4 CO23102.5 3CS304	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Digital Electronics Year of study: 2018-19
3CS102           CO23102.1           CO23102.2           CO23102.3           CO23102.4           CO23102.5           3CS304           CO23304.1	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Digital Electronics Year of study: 2018-19         To understand and examine the structure of various number systems and its application in digital design.
3CS102 CO23102.1 CO23102.2 CO23102.3 CO23102.4 CO23102.5 3CS304 CO23304.1 CO23304.2	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Digital Electronics Year of study: 2018-19         To understand and examine the structure of various number systems and its application in digital design.         To prepare students to perform the analysis and design of various digital electronic circuits.
3CS102 CO23102.1 CO23102.2 CO23102.3 CO23102.4 CO23102.5 3CS304 CO23304.1 CO23304.2 CO23304.3	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Digital Electronics Year of study: 2018-19         To understand and examine the structure of various number systems and its application in digital design.         To prepare students to perform the analysis and design of various digital electronic circuits.         Ability to identify basic requirements for a design application and propose a cost effective solution.
3CS102 CO23102.1 CO23102.2 CO23102.3 CO23102.4 CO23102.5 3CS304 CO23304.1 CO23304.2 CO23304.4	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Digital Electronics Year of study: 2018-19         To understand and examine the structure of various number systems and its application in digital design.         To prepare students to perform the analysis and design of various digital electronic circuits.         Ability to identify basic requirements for a design application and propose a cost effective solution.         The ability to understand, and design various combinational circuits such as adder subtractor, encoder and decoder
3CS102         CO23102.1         CO23102.2         CO23102.3         CO23102.4         CO23102.5         3CS304         CO23304.1         CO23304.2         CO23304.3         CO23304.4	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Digital Electronics Year of study: 2018-19         To understand and examine the structure of various number systems and its application in digital design.         To prepare students to perform the analysis and design of various digital electronic circuits.         Ability to identify basic requirements for a design application and propose a cost effective solution.         The ability to understand, analyze and design various scombinational circuits such as adder, subtractor, encoder and decoder.
3CS102           CO23102.1           CO23102.2           CO23102.3           CO23102.4           CO23102.5           3CS304           CO23304.1           CO23304.3           CO23304.5	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Students will be able to perform the analysis and design of various digital electronic circuits.         Ability to identify basic requirements for a design application and propose a cost effective solution.         The ability to understand, analyze and design various combinational circuits such as adder, subtractor, encoder and decoder.         The ability to understand, analyze and design various sequential circuits such as counter ,FSM and identify timing issues in a that digital design.
3CS102 CO23102.1 CO23102.2 CO23102.3 CO23102.4 CO23102.5 3CS304 CO23304.1 CO23304.2 CO23304.3 CO23304.4 CO23304.5	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Digital Electronics Year of study: 2018-19         To understand and examine the structure of various number systems and its application in digital design.         To prepare students to perform the analysis and design of various digital electronic circuits.         Ability to identify basic requirements for a design application and propose a cost effective solution.         The ability to understand, analyze and design various combinational circuits such as adder, subtractor, encoder and decoder.         The ability to understand, analyze and design various sequential circuits such as counter ,FSM and identify timing issues in a that digital design.
3CS102         CO23102.1         CO23102.2         CO23102.3         CO23102.4         CO23102.5         3CS304         CO23304.1         CO23304.3         CO23304.4         CO23304.5	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Students and and examine the structure of various number systems and its application in digital design.         To prepare students to perform the analysis and design of various digital electronic circuits.         Ability to identify basic requirements for a design application and propose a cost effective solution.         The ability to understand, analyze and design various sequential circuits such as adder, subtractor, encoder and decoder.         The ability to understand, analyze and design various sequential circuits such as counter ,FSM and identify timing issues in a that digital design.         Deta       The ability to understand, analyze and design various sequential circuits such as counter ,FSM and identify timing issues in a that digita
3CS102         CO23102.1         CO23102.2         CO23102.3         CO23102.4         CO23102.5         3CS304         CO23304.1         CO23304.3         CO23304.5         3CS405         CO23405.1	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Students understand and examine the structure of various number systems and its application in digital design.         To prepare students to perform the analysis and design of various digital electronic circuits.         Ability to inderstand, analyze and design various combinational circuits such as adder, subtractor, encoder and decoder.         The ability to understand, analyze and design various sequential circuits such as counter
3CS102         CO23102.1         CO23102.2         CO23102.3         CO23102.4         CO23102.5         GO23102.5         CO23102.5         CO23102.5         CO23102.5         CO23102.5         GO23102.5         GO23102.5         GO23102.5         GO23304.1         CO23304.2         CO23304.5         GO23304.5         GO23405.5	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Digital Electronics Year of study: 2018-19         To understand and examine the structure of various number systems and its application in digital design.         To prepare students to perform the analysis and design of various digital electronic circuits.         Ability to identify basic requirements for a design application and propose a cost effective solution.         The ability to understand, analyze and design various combinational circuits such as adder,subtractor, encoder and decoder.         The ability to understand, analyze and design various sequential circuits such as counter ,FSM and identify timing issues in a that digital design.         Didat Electronic stude alogorithms and convert those algorithms into a C langu
3CS102         CO23102.1         CO23102.2         CO23102.3         CO23102.4         CO23102.5         GO23102.5         CO23102.5         CO23102.5         CO23102.5         CO23102.5         GO23102.5         GO23102.5         GO23102.5         GO23304.1         CO23304.2         CO23304.5         GO23304.5         CO23405.1         CO23405.2         CO23405.3	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Digital Electronics Year of study: 2018-19         To understand and examine the structure of various number systems and its application in digital design.         To prepare students to perform the analysis and design orivious digital electronic circuits.         Ability to uiderstand, analyze and design various combinational circuits such as adder, subtractor, encoder and decoder.         The ability to uider
3CS102         CO23102.1         CO23102.2         CO23102.3         CO23102.4         CO23102.5         GO23102.5         CO23102.5         CO23102.5         CO23102.4         CO23102.5         GO23102.5         GO23102.5         CO23102.5         GO23004.1         CO23304.2         CO23304.3         CO23304.5         GO23405.5         CO23405.2         CO23405.3         CO23405.4	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Students will be able to express themselves better of various number systems and its application in digital design.         To understand and examine the structure of various number systems and its application in digital design.         To prepare students to perform the analysis and design of various digital electronic circuits.         Ability to identify basic requirements for a design application and propose a cost effective solution.         The ability to understand, analyze and design various combinational circuits such as adder, subtractor, encoder and decoder.         The ability to understand, analyze and design various sequential circuits such as counter, FSM and identify timing issues in a that digital design.         Dist
3CS102         CO23102.1         CO23102.2         CO23102.3         CO23102.4         CO23102.5         CO23102.5         CO23102.5         CO23304.1         CO23304.3         CO23304.3         CO23304.5         CO23304.5         CO23304.5         CO23405.1         CO23405.3         CO23405.4         CO23405.4         CO23405.4         CO23405.4	Technical Communication Year of study: 2018-19         Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing task         Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.         Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.         Students will be able to get an in depth knowledge of technical communication used in professional life by getting to know all the forms and aspects of Technical Communication.         Students will be able to express themselves better in technical writing by understanding the concept, style and methodology used in Technical communication.         Digital Electronics Year of study: 2018-19         To understand and examine the structure of various number systems and its application in digital design.         To prepare students to perform the analysis and design of various digital electronic circuits.         Ability to identify basic requirements for a design application and propose a cost effective solution.         The ability to understand, analyze and design various combinational circuits such as adder, subtractor, encoder and decoder.         The ability to understand, analyze and design various sequential circuits such as counter ,FSM and identify timing issues in a that digital design.         Students will be able to design algorithms and convert those algorithms into

303400	Object Oriented Programming Year of study: 2018-19
CO23406.1	Student should be able to write programs using different programming paradigm such as top down and bottom up.
	Students should be able to write programs using OOPs concept, they should be abble to create classes and to call the properties of classes
CO23406.2	using objects. They should be able to apply access specifiers on the members of the class.
	Students should be able to write C++ code to inherit properties of one class into another. They should be able to apply the concept of
CO23406.3	virtual functions with espect to multiple inheritance.
CO23406.4	Students should be able to write the C++ code for the operator overloading function and can perform overriding of functions.
001010011	Student should be able to reate dwamic arrays using template programming. Also be will be able to define generic functions who can
CO23406.5	Student should be able to create dynamic analysising template programming. Also he will be able to define generic functions who can be form onertains on different datatives
	perform operations on uniferent datatypes.
3CS407	Software Engineering Year of study: 2018-19
CO23407.1	Student will understand fundamental concepts in software engineering, SDLC, software requirements specification, formal requirements
	specification and verification
CO23407.2	Student will learn about Software Project Management and able to calculate the cost based on line of code.
CO23407.3	Student will be able to prepare various documents such as requirement analysis (SRS) and Structured analysis.
CO23407.4	Student will learn fundamental software design and Effective modular design.
CO23407.5	Student will be able to design UML diagrams for a given requirement specifications.
405304	
4CS201	Discrete Mathematical Structure Year of study: 2018-19
CO24201.1	Fundamental concepts of mathematics sets, functions, relations.
CO24201.2	Write an argument using logical notation and determine if the argument is or is not valid.
CO24201.3	Demonstrate the ability to find permutation, combination & lattice.
CO24201 4	Fundamental concents of groups & rings
CO24201.4	Demonstrate different travered methods for trace and graphs
024201.5	Demonstrate unrerent traversal methods for trees and graphs.
4CS103	Managerial Economics and Financial Accounting Year of study: 2018-19
CO24103.1	Students will able to know abot national income and its calculation, and will also able to know basic concepts of M.E.F.A.
CO24103.2	Students will able to know about law of demand, dmand forecasting law of supply and elasticity of demand and supply
0021103.2	tudents will able to know about theory of prediction. The of unitable prediction and unitable to and production estimation
0024103.3	Students will able to know about theory of production, have of variable proportion and various types of cost and production optimization.
CO24103.4	Students will learn about market structure and its types and pricing theory of market.
CO24103.5	Students will learn abou tcash flow analysis, balance sheet, profit - loss statement , financial ration analysis , capital budgetiing techniques.
4CS304	Microprocessor & Interfaces Year of study: 2018-19
4CS304	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about
<b>4CS304</b> CO24304.1	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices.
4CS304 CO24304.1	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to
4CS304 CO24304.1 CO24304.2	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions.
4CS304 CO24304.1 CO24304.2	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly
4CS304 CO24304.1 CO24304.2 CO24304.3	Microprocessor & Interfaces Year of study: 2018-19         Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices.         Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions.         Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor.
4CS304           CO24304.1           CO24304.2           CO24304.3	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place.
4CS304 CO24304.1 CO24304.2 CO24304.3 CO24304.4	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor .
4CS304 CO24304.1 CO24304.2 CO24304.3 CO24304.4 CO24304.5	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop I2C module for data transmission between processor and LCD module.
4CS304         CO24304.1         CO24304.2         CO24304.3         CO24304.4         CO24304.5	Microprocessor & Interfaces Year of study: 2018-19         Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about         microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices.         Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions.         Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor.         Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place.         Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor .         To design and develop I2C module for data transmission between processor and LCD module.
4CS304         CO24304.1         CO24304.2         CO24304.3         CO24304.4         CO24304.5	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop I2C module for data transmission between processor and LCD module.
4CS304         CO24304.1         CO24304.2         CO24304.3         CO24304.4         CO24304.5         4CS405	Microprocessor & Interfaces Year of study: 2018-19         Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about         microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices.         Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions.         Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor.         Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place.         Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor .         To design and develop I2C module for data transmission between processor and LCD module.         Data Base Management System Year of study: 2018-19
4CS304           CO24304.1           CO24304.2           CO24304.3           CO24304.4           CO24304.5           CO24304.5	Microprocessor & Interfaces Year of study: 2018-19         Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about         microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices.         Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions.         Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor.         Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place.         Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor .         To design and develop I2C module for data transmission between processor and LCD module.         Data Base Management System Year of study: 2018-19         Students will be able to learn the basic concepts and appreciate the applications of database systems.
4CS304         CO24304.1         CO24304.2         CO24304.3         CO24304.4         CO24304.5         CO24304.5         CO24304.5         CO24304.5	Microprocessor & Interfaces Year of study: 2018-19         Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices.         Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions.         Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place.         Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor .         To design and develop I2C module for data transmission between processor and LCD module.         Data Base Management System Year of study: 2018-19         Students will be able to learn the basic concepts and appreciate the applications of database systems.         Students will be familiar with a commercial relational database system (Oracle) by writing SQL using the system.
4CS304 CO24304.2 CO24304.2 CO24304.3 CO24304.4 CO24304.5 4CS405 CO24405.1 CO24405.2 CO24405.2	Microprocessor & Interfaces Year of study: 2018-19         Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices.         Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions.         Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place.         Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor .         To design and develop I2C module for data transmission between processor and LCD module.         Data Base Management System Year of study: 2018-19         Students will be able to learn the basic concepts and appreciate the applications of database systems.         Students will be familiar with a commercial relational database system (Oracle) by writing SQL using the system.         Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and
4CS304           CO24304.1           CO24304.2           CO24304.3           CO24304.4           CO24304.5           CO24405.1           CO24405.3	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop 12C module for data transmission between processor and LCD module. Data Base Management System Year of study: 2018-19 Students will be able to learn the basic concepts and appreciate the applications of database systems. Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and normalization approach.
4CS304           CO24304.1           CO24304.2           CO24304.3           CO24304.4           CO24304.5           CO24405.1           CO24405.3           CO24405.4	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop I2C module for data transmission between processor and LCD module. Data Base Management System Year of study: 2018-19 Students will be able to learn the basic concepts and appreciate the applications of database systems. Students will be familiar with a commercial relational database system (Oracle) by writing SQL using the system. Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and normalization approach. Students will be familiar with basic database transaction processing and transaction states.
4CS304         CO24304.1         CO24304.2         CO24304.3         CO24304.4         CO24304.5         CO24304.5         CO24405.1         CO24405.3         CO24405.4         CO24405.3         CO24405.4	Microprocessor & Interfaces Year of study: 2018-19         Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about         microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices.         Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to         identify the addressing modes and length in bytes of instructions.         Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly         language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor.         Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place.         Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor .         To design and develop 12C module for data transmission between processor and LCD module.         Data Base Management System Year of study: 2018-19         Students will be able to learn the basic concepts and appreciate the applications of database systems.         Students will be able to understand the relational database system (Oracle) by writing SQL using the system.         Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and normalization approach.         Students will be fa
4CS304         CO24304.1         CO24304.2         CO24304.3         CO24304.4         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24405.1         CO24405.3         CO24405.4         CO24405.5	<ul> <li>Microprocessor &amp; Interfaces Year of study: 2018-19</li> <li>Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices.</li> <li>Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions.</li> <li>Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place.</li> <li>Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor .</li> <li>To design and develop 12C module for data transmission between processor and LCD module.</li> <li>Data Base Management System Year of study: 2018-19</li> <li>Students will be able to learn the basic concepts and appreciate the applications of database system.</li> <li>Students will be familiar with a commercial relational database theory, be able to write relational algebra expressions for queries and normalization approach.</li> <li>Students will be familiar with basic database transaction processing and transaction states.</li> <li>Students will be familiar with the basic ciscues of database failure, recovery and concurrency control.</li> </ul>
4CS304         CO24304.1         CO24304.2         CO24304.3         CO24304.4         CO24304.5         CO24304.5         CO24405.1         CO24405.3         CO24405.3         CO24405.3         CO24405.4         CO24405.5	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop 12C module for data transmission between processor and LCD module. <b>Data Base Management System Year of study: 2018-19</b> Students will be able to learn the basic concepts and appreciate the applications of database system. Students will be familiar with a commercial relational database system (Oracle) by writing SQL using the system. Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and normalization approach. Students will be familiar with basic database transaction processing and transaction states. Students will be familiar with the basic issues of database failure, recovery and concurrency control.
4CS304         CO24304.1         CO24304.2         CO24304.3         CO24304.4         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24405.1         CO24405.3         CO24405.4         CO24405.5 <b>4CS406</b>	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop 12C module for data transmission between processor and LCD module.  Data Base Management System Year of study: 2018-19 Students will be able to learn the basic concepts and appreciate the applications of database systems. Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and normalization approach. Students will be familiar with basic database transaction processing and transaction states. Students will be familiar with the basic issues of database failure, recovery and concurrency control. Theory of Computation Year of study: 2018-19
4CS304           CO24304.1           CO24304.2           CO24304.3           CO24304.4           CO24304.5           CO24304.5           CO24304.5           CO24304.5           CO24304.5           CO24304.5           CO24304.5           CO24304.5           CO24405.1           CO24405.3           CO24405.4           CO24405.5           4CS406           CO24405.1	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop I2C module for data transmission between processor and LCD module. Data Base Management System Year of study: 2018-19 Students will be able to learn the basic concepts and appreciate the applications of database systems. Students will be familiar with a commercial relational database system (Oracle) by writing SQL using the system. Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and normalization approach. Students will be familiar with basic database transaction processing and transaction states. Students will be familiar with the basic issues of database failure, recovery and concurrency control. Theory of Computation Year of study: 2018-19 Students will be able to analyze and design finite automata and apply formal mathematical methods to prove properties of languages;
4CS304           CO24304.1           CO24304.2           CO24304.3           CO24304.4           CO24304.5           CO24304.5           CO24304.5           CO24304.5           CO24304.5           CO24304.5           CO24405.1           CO24405.3           CO24405.4           CO24405.5           CO24405.5           CO24405.5	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop 12C module for data transmission between processor and LCD module.  Data Base Management System Year of study: 2018-19 Students will be able to learn the basic concepts and appreciate the applications of database systems. Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and normalization approach. Students will be familiar with basic database transaction processing and transaction states. Students will be familiar with the basic issues of database failure, recovery and concurrency control.  Theory of Computation Year of study: 2018-19 Students will be able to analyze and design finite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and design regular expression
4CS304           CO24304.1           CO24304.2           CO24304.3           CO24304.4           CO24304.5           CO24304.5           CO24304.5           CO24304.5           CO24304.5           CO24304.5           CO24304.5           CO24405.1           CO24405.4           CO24405.5           CO24405.5           CO24405.4           CO24405.5           CO24405.4           CO24405.5           CO24405.4           CO24405.5	Microprocessor & Interfaces Year of study: 2018-19         Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about         microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices.         Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to         identify the addressing modes and length in bytes of instructions.         Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly         language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor.         Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place.         Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor .         To design and develop 12C module for data transmission between processor and LCD module.         Data Base Management System Year of study: 2018-19         Students will be able to learn the basic concepts and appreciate the applications of database system.         Students will be able to understand the relational database system (Oracle) by writing SQL using the system.         Students will be able to analyze and design inite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and design rinite automata and apply formal mathematical
4CS304         CO24304.1         CO24304.2         CO24304.3         CO24304.4         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24405.1         CO24405.3         CO24405.4         CO24405.5         CO24405.4         CO24405.5         CO24405.5         CO24405.4         CO24405.5	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop 12C module for data transmission between processor and LCD module.  Data Base Management System Year of study: 2018-19 Students will be able to learn the basic concepts and appreciate the applications of database systems. Students will be able to learn the basic concepts and appreciate the applications of database system. Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and normalization approach. Students will be familiar with basic database transaction processing and transaction states. Students will be familiar with basic sisues of database failure, recovery and concurrency control.  Theory of Computation Year of study: 2018-19 Students will be able to develop the ability to apply the ideas about context free grammars, Derivation and ambiguity. They will also be able to solve Greibach and design finite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and design re
4CS304         CO24304.1         CO24304.2         CO24304.3         CO24304.4         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24405.1         CO24405.3         CO24405.4         CO24405.5         CO24405.4         CO24405.5         CO24405.5         CO24405.5         CO24405.5	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop 12C module for data transmission between processor and LCD module.  Data Base Management System Year of study: 2018-19 Students will be able to learn the basic concepts and appreciate the applications of database system. Students will be able to understand the relational database system (Oracle) by writing SQL using the system. Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and normalization approach. Students will be familiar with basic database transaction processing and transaction states. Students will be familiar with the basic issues of database failure, recovery and concurrency control.  Theory of Computation Year of study: 2018-19 Students will be able to develop the ability to apply the ideas about context free grammars, berivation and ambiguity. They will also be able to solve Greibach and Chomsky Normal form related problems including membership problems.
4CS304         CO24304.1         CO24304.2         CO24304.3         CO24304.4         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24405.1         CO24405.3         CO24405.4         CO24405.5         CO24405.4         CO24405.5         CO24405.4         CO24405.3         CO24406.1         CO24406.2         CO24406.3         CO24406.4	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn instructions of 8085 microprocessor. Functional experiments available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students and develop 12C module for data transmission between processor and LCD module.  Data Base Management System Year of study: 2018-19 Students will be able to learn the basic concepts and appreciate the applications of database systems. Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and normalization approach. Students will be familiar with basic database transaction processing and transaction states. Students will be familiar with the basic issues of database failure, recovery and concurrency control.  Theory of Computation Year of study: 2018-19 Students will be familiar with the basic issues of database failure, recovery and concurrency control.  Theory of Computation Year of study: 2018-19 Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and normalization approach. Students will be able to analyze and design finite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and design regular expression Students will be able to develop the ability to apply the ideas about context free grammars, Derivation and ambiguity. They will also be able to solve Greibach and C
4CS304         CO24304.1         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24405.3         CO24406.3         CO24406.3         CO24406.3	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupt savailable in 8085 microprocessor. Students will are able to design and develope the circuit for memory and I/O interfacing with 8085 processor. To design and develop 12C module for data transmission between processor and LCD module.  Data Base Management System Year of study: 2018-19 Students will be able to learn the basic concepts and appreciate the applications of database system. Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and normalization approach. Students will be familiar with a commercial relational database failure, recovery and concurrency control.  Theory of Computation Year of study: 2018-19 Students will be able to analyze and design finite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and design finite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and design finite automata and apply formal mathematical methods to prove properties of languages; Students will be able to construct Turing machine for different problems including membership problems. Students will be able to construct Turing machine for different problems including membership problems. Students will be able to
4CS304         CO24304.1         CO24304.2         CO24304.3         CO24304.4         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24405.1         CO24405.3         CO24405.4         CO24405.5         CO24405.4         CO24405.5         CO24405.5         CO24405.4         CO24405.3         CO24406.1         CO24406.2         CO24406.4         CO24406.4	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop 12C module for data transmission between processor and LCD module.  Data Base Management System Year of study: 2018-19 Students will be able to learn the basic concepts and appreciate the applications of database system. Students will be able to understand the relational database system (Oracle) by writing SQL using the system. Students will be familiar with a commercial relational database system (Oracle) by writing SQL using the system. Students will be familiar with basic database transaction processing and transaction states. Students will be familiar with the basic issues of database failure, recovery and concurrency control.  Theory of Computation Year of study: 2018-19 Students will be able to analyze and design finite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and design finite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and design regular expression Students will be able
4CS304         CO24304.1         CO24304.2         CO24304.3         CO24304.4         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24304.5         CO24405.1         CO24405.3         CO24405.4         CO24405.5         CO24405.4         CO24405.5         CO24405.5         CO24405.4         CO24405.3         CO24406.1         CO24406.2         CO24406.3         CO24406.4	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop 12C module for data transmission between processor and LCD module.  Data Base Management System Year of study: 2018-19 Students will be able to learn the basic concepts and appreciate the applications of database systems. Students will be able to understand the relational database system (Oracle) by writing SQL using the system. Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and normalization approach. Students will be able to analyze and design finite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and design finite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and design regular expression Students will be able to concept of PDA and able to analyze and esign problems. Students will be able to construct Turing machine for different problems and argue formally about correctness on different restricted machin
4CS304         CO24304.2         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24405.3         CO24405.3         CO24405.3         CO24405.3         CO24405.3         CO24405.3         CO24405.3         CO24405.3         CO24405.3         CO24406.3         CO24406.3         CO24406.4         CO24406.5	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop 12C module for data transmission between processor and LCD module.  Data Base Management System Year of study: 2018-19 Students will be able to learn the basic concepts and appreciate the applications of database systems. Students will be able to understand the relational database system (Oracle) by writing SQL using the system. Students will be familiar with a commercial relational database theory, be able to write relational algebra expressions for queries and normalization approach. Students will be able to analyze and design finite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and design regular expression Students will be able to construct Turing machine for different problems and argue formally about correctness on different restricted machine models of computation. They can distinguish different computing inguages and classify their respective types Students will be able to construct Turing machine for different problems and argue for
4CS304         CO24304.2         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24304.3         CO24405.3         CO24405.3         CO24405.3         CO24405.3         CO24405.3         CO24405.3         CO24405.3         CO24405.3         CO24405.3         CO24406.3         CO24406.3         CO24406.3         CO24406.4         CO24406.5         CO24406.3         CO24406.4         CO24406.4         CO24406.5	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessors, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students are able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop I2C module for data transmission between processor and LCD module.  Data Base Management System Year of study: 2018-19 Students will be able to learn the basic concepts and appreciate the applications of database system. Students will be able to understand the relational database theory, be able to write relational algebra expressions for queries and normalization approach. Students will be familiar with basic database transaction processing and transaction states. Students will be familiar with the basic issues of database failure, recovery and concurrency control.  Teory of Computation Year of study: 2018-19 Students will be able to advesting finite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and design finite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and design finite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and de
4CS304       CO24304.2       CO24304.3       CO24304.3       CO24304.3       CO24304.3       CO24304.3       CO24304.3       CO24304.3       CO24405.3       CO24406.3       CO24407.1	Microprocessor & Interfaces Year of study: 2018-19 Understand the 8085 microprocessor's architecture, pin description and its functionality in depth. Student will get an idea about microprocessor based system by designing logical circuitry in order to interface processor with memory and I/O devices. Students will learn instructions of 8085 microprocessor, their classification and different programming techniques. Student will be able to identify the addressing modes and length in bytes of instructions. Students will learn additional 16 bit instructions and arithmetic operations. Student will be able to design, write, and analyze assembly language programs of 8085 microprocessor. Student will be able to learn about various interrupts available in 8085 microprocessor. Interrupt structure, interrupt vector table and interrupt service routines etc. as well as how serial communication takes place. Students will be able to design and develope the circuit for memory and I/O interfacing with 8085 processor . To design and develop I2C module for data transmission between processor and LCD module.  Data Base Management System Year of study: 2018-19 Students will be able to learn the basic concepts and appreciate the applications of database systems. Students will be familiar with a commercial relational database system (Oracle) by writing SQL using the system. Students will be familiar with basic database transaction processing and transaction states. Students will be familiar with basic issues of database failure, recovery and concurrency control.  Theor of Computation Year of study: 2018-19 Students will be able to design finite automata and apply formal mathematical methods to prove properties of languages; grammars also analyze and design regulter expression Students will be able to analyze and design regult expression Students will be able to construct Turing machine for different problems including membership problems. Students will be able to construct Turing machine for different problems including membership pro

CO24407.2	Students will be able to examine various Data Link layer design issues and Data Link protocols and understand data link layer
0004407.0	functionalities i.e error detection and correction methods.
CO24407.3	Students will be able to understand various netwok layer functionalities i.e routing and IP addressing and internetworking.
CO24407.4	Students will be able to examine the important aspects, functions, services and protocols of transport layer.
0024407.5	Students will be able to understand application layer services, protocols and network security.
F.001.4	Communitier Annihilite shume Manna of shundru 2010 40
5CS1A	Computer Architecture Year of study: 2018-19
0351.1	Students will be able to understand basic structure of computer.
00351.2	Students will be able to understand control unit operations, will able to conceptualize instruction level parallelism.
CO351.3	Students will able to perform computer arithmetic operations
CO351.4	Students will be able to design memory organization that uses banks for different word size operations., understand the concept of cache mapping techniques.
CO351.5	Students will be able to understand the concept of I/O organization
5CS2A	Digital Logic Design Year of study: 2018-19
CO352.1	Understand the describe the basics of Hardware Description Languages and their use in digital logic design.
CO352.2	Develop the VHDL coding for combinational logic and Sequential circuits
CO352.3	Explain the synchronous Sequential logic circuits, draw the block diagram of Shift Registers
CO352.4	Design and develope of asynchronous and synchronous sequential circuits such as counter, FSM.
CO352.5	Describe the operation of Programmable Logic Devices
5CS3A	Telecommunication Fundamentals Year of study: 2018-19
CO353.1	Analyze different transmission terminologies, transmission mediums, line coding schemes, network models and flow control techniques.
CO353.2	Apply different error detection and correction techniques in data transmission.
CO353.3	Acquire knowledge about different wireless standard and switching mechanisms in data link layer.
CO353.4	Explain the different multiplexing & multiple access techniques.
CO353.5	Ability to design and develop PN sequenec encoder for spread spectrum techniques.
5CS4A	Database Management Systems Year of Study: 2018-19
CO354.1	understanding of major DBMS components and their function.
CO354.2	Students will be able to model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model.
CO354.3	Students will be familiar with the relational database theory, and be able to write relational algebra expressions for queries.
CO354.4	Students will be able to Identify Structure Query Language statements used in creation and manipulation of Database. Students will be able to write SQL commands in a relational DBMS.
CO354.5	Students will be able to understand the concept of database normalization and students can construct normalized databases for various
5CS5A	Operating Systems Year of study: 2018-19
<b>5CS5A</b> CO355.1	Operating Systems Year of study: 2018-19           Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system
<b>5CS5A</b> CO355.1	Operating Systems Year of study: 2018-19           Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.           Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate
<b>5CS5A</b> CO355.1 CO355.2	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks
<b>5CS5A</b> C0355.1 C0355.2 C0355.3	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies
5CS5A C0355.1 C0355.2 C0355.3 C0355.4	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments
5CS5A CO355.1 CO355.2 CO355.3 CO355.4 CO355.5	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.
SCS5A           C0355.1           C0355.2           C0355.3           C0355.4           C0355.5	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.
5CS5A CO355.1 CO355.2 CO355.3 CO355.4 CO355.5 SCS6.1A	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.         Advanced Data Structure Year of study: 2018-19
<b>5CS5A</b> CO355.1 CO355.2 CO355.3 CO355.4 CO355.5 <b>5CS6.1A</b> CO356.1	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.         Advanced Data Structure Year of study: 2018-19         Ability to understand types of Balanced Trees and their operations.
5CS5A CO355.1 CO355.2 CO355.3 CO355.4 CO355.5 5CS6.1A CO356.1 CO356.2	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.         Advanced Data Structure Year of study: 2018-19         Ability to understand types of Balanced Trees and their operations.         Ability to understand concepts and operations of Heaps.
SCSSA           C0355.1           C0355.2           C0355.3           C0355.4           C0355.5           SCS6.1A           C0356.1           C0356.2           C0356.3	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.         Advanced Data Structure Year of study: 2018-19         Ability to understand types of Balanced Trees and their operations.         Ability to understand graph terminology and its various algorithm to solve engineering problems.
5CS5A CO355.1 CO355.2 CO355.3 CO355.4 CO355.5 5CS6.1A CO356.1 CO356.2 CO356.3 CO356.4	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.         Advanced Data Structure Year of study: 2018-19         Ability to understand types of Balanced Trees and their operations.         Ability to understand graph terminology and its various algorithm to solve engineering problems.         Ability to understand parallel processing using sorter and merger networks.
SCSSA           CO355.1           CO355.2           CO355.3           CO355.4           CO355.5           SCS6.1A           CO356.1           CO356.2           CO356.3           CO356.4           CO356.5	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.         Advanced Data Structure Year of study: 2018-19         Ability to understand types of Balanced Trees and their operations.         Ability to understand graph terminology and its various algorithm to solve engineering problems.         Ability to understand parallel processing using sorter and merger networks.         Ability to understand mathematical theorems used in data structures
<b>5CS5A</b> CO355.1 CO355.2 CO355.3 CO355.4 CO355.5 <b>5CS6.1A</b> CO356.1 CO356.2 CO356.3 CO356.4 CO356.5	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.         Advanced Data Structure Year of study: 2018-19         Ability to understand types of Balanced Trees and their operations.         Ability to understand graph terminology and its various algorithm to solve engineering problems.         Ability to understand parallel processing using sorter and merger networks.         Ability to understand mathematical theorems used in data structures
5CS5A CO355.1 CO355.2 CO355.3 CO355.4 CO355.5 5CS6.1A CO356.1 CO356.2 CO356.3 CO356.4 CO356.5	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.         Advanced Data Structure Year of study: 2018-19         Ability to understand graph terminology and its various algorithm to solve engineering problems.         Ability to understand parallel processing using sorter and merger networks.         Ability to understand mathematical theorems used in data structures         Computer Networks Year of study: 2018-19
5CS5A CO355.1 CO355.2 CO355.3 CO355.4 CO355.5 5CS6.1A CO356.1 CO356.2 CO356.3 CO356.4 CO356.5 5 CO356.4 CO356.5	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.         Advanced Data Structure Year of study: 2018-19         Ability to understand types of Balanced Trees and their operations.         Ability to understand graph terminology and its various algorithm to solve engineering problems.         Ability to understand parallel processing using sorter and merger networks.         Ability to understand mathematical theorems used in data structures         Computer Networks Year of study: 2018-19         Students will learn how networked computing devices pass data to each other along data connections
5CS5A CO355.1 CO355.2 CO355.3 CO355.4 CO355.5 5CS6.1A CO356.1 CO356.2 CO356.3 CO356.3 CO356.4 CO356.5 6CS1A CO361.1 CO361.2	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.         Advanced Data Structure Year of study: 2018-19         Ability to understand types of Balanced Trees and their operations.         Ability to understand graph terminology and its various algorithm to solve engineering problems.         Ability to understand parallel processing using sorter and merger networks.         Ability to understand mathematical theorems used in data structures         Computer Networks Year of study: 2018-19         Students will learn how networked computing devices pass data to each other along data connections         Students will learn about types of errors, and error detection & correction methods such as stop and weight, Go-Back-N. They will also truck AOMA and Siched AU DMA
5CS5A CO355.1 CO355.2 CO355.3 CO355.4 CO355.5 5CS6.1A CO356.1 CO356.2 CO356.3 CO356.4 CO356.5 6CS1A CO361.1 CO361.2 CO361.3	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.         Advanced Data Structure Year of study: 2018-19         Ability to understand concepts and operations of Heaps.         Ability to understand graph terminology and its various algorithm to solve engineering problems.         Ability to understand mathematical theorems used in data structures         Computer Networks Year of study: 2018-19         Students will be able to recessing using sorter and merger networks.         Ability to understand mathematical theorems used in data structures         Computer Networks Year of study: 2018-19         Students will learn how networked computing devices pass data to each other along data connections         Students will learn how networked computing devices pass data to each other along data connections </td
5CS5A CO355.1 CO355.2 CO355.3 CO355.4 CO355.5 5CS6.1A CO356.1 CO356.2 CO356.3 CO356.4 CO356.5 6CS1A CO361.1 CO361.2 CO361.3 CO361.4	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.         Advanced Data Structure Year of study: 2018-19         Ability to understand concepts and operations of Heaps.         Ability to understand prallel processing using sorter and merger networks.         Ability to understand mathematical theorems used in data structures         Computer Networks Year of study: 2018-19         Students will learn how networked computing devices pass data to each other along data connections         Students will learn how networked computing devices pass data to each other along data connections         Students will learn how networked computing devices pass data to each other along data connections         Students will learn about types of errors, and error detection & correction methods such as stop and weight, Go-Back-N. They will also study about
5CS5A CO355.1 CO355.2 CO355.3 CO355.4 CO355.5 5CS6.1A CO356.1 CO356.2 CO356.2 CO356.3 CO356.4 CO356.5 6CS1A CO361.1 CO361.2 CO361.3 CO361.4 CO361.5	Operating Systems Year of study: 2018-19         Students will be able to understand principles of operating systems ,design and implementations, Understand the various components and functions of an operating system.         Students will be able to analyzeand apply suitable Process Scheduling Algorithm and Memory Partition Techniques, Apply appropriate techniques to avoid control problems such as mutual exclusion and deadlocks         Students will be able to memorize deadlock, Methods for handling deadlocks and memory management strategies         Students will be able to gain the knowledge of memory management algorithm and CPU scheduling techniques. Implement and evaluate operating system components in Windows and Unix environments         Students will be able to understand and memorize various file and disk management strategies.         Advanced Data Structure Year of study: 2018-19         Ability to understand types of Balanced Trees and their operations.         Ability to understand graph terminology and its various algorithm to solve engineering problems.         Ability to understand parallel processing using sorter and merger networks.         Ability to understand mathematical theorems used in data structures         Computer Networks Year of study: 2018-19         Students will learn how networked computing devices pass data to each other along data connections         Students will learn how networked computing devices pass data to each other along data connections         Students will learn how networked computing devices pass data to each other along data connections         St

6CS2A	Design and Analysis of Algorithms Year of study: 2018-19
CO362.1	Students will be able to understand various asymptotic notations, its properties and use in measuring algorithm behavior, learn about various sorting, greedy and divide and conquer approach.
CO362.2	Students will able to apply various algorithms for different computing problems using dynamic programming and branch and bound techniques.
CO362.3	Students will be able to design and evaluate algorithms using various algorithm design techniques for pattern matching algorithms.
CO362.4	Students will be able to analyze randomized algorithms, Recite algorithms that employ randomization.
CO362.5	Relate the concepts of NP Completeness for analyze and solving the complexity of real life problems.
6CS3A	Theory Of Computation Year of study: 2018-19
CO363.1	Students will be able to analyze and design finite automata also can apply rigorously formal mathematical methods to design automata.
CO363.2	Students will be able to apply formal mathematical methods to prove properties of languages; grammars also analyze and design regular Expression and grammars.
CO363.3	Students will be able to develop the ability to apply the ideas about context free grammars, Derivation and ambiguity along the designing of Pushdown Automata.
CO363.4	Students will be able to Construct Turing machine for different problems and argue formally about correctness on different restricted machine models of computation. They can demonstrate their understanding of key notions, such as computability, decidability, and complexity through problem solving.
CO363.5	Students will be able to distinguish different computing languages and classify their respective types.
6CS4A	Computer Graphics and Multimedia Techniques Year of study: 2018-19
CO364.1	Students will be able to define the basics of computer graphics, different graphics systems, application of computer graphics and
	rasterisation of line, circle and ellipse. Students will be able to apply geometric transformations on graphics objects, their application in composite form, different color filling
CO364.2	algorithm and clipping algorithm.
CO364.3	Students will be able to identify visible surface detection techniques & curves.
CO364.4	Students will be able to render projected objects to naturalize the scene in 2D view and use of illumination models & color models.
CO364.5	Students will be able to identify multimedia components and animation techniques.
COSTA	Embadded Custom Design Very of study 2018-10
CO265 1	Embedded System Design fear of study: 2018-19
CO365.1	Suggest design approach and requirements of embedded systems.
CO365 3	Select the criteria's of designing and implementing a real time embedded system
CO365.4	Analyse the basics of real time operating systems and different scheduling concents
	design and develope real time embedded system such as traffic light controller.ON-OFF controller and tested using software
CO365.5	development tools.
C05CA	A deserve Textise in Organizing Conterne View of study 2017 40
bCSbA	Advance lopics in Operating Systems year of study: 2017-18
C366.1	systems and mobile computing
C366.2	Develop an ability to understand the use of virtualization and cloud technologies
C366.3	Develop an ability to design operating system which supports database transactions, ACID properties and serializability
C366.4	To give an understanding of practical engineering issues in real-time and concurrent systems
C366.5	To discuss limitations of widely-used operating systems, introduce new design approaches to address challenges of security, robustness,
7CS1A	Cloud Computing Year of study: 2018-19
CO471.1	Students will be able to understand the fundamentals of cloud computing along with cloud computing design and challenges.
CO471.2	Students will be able to use relevant software tools used in cloud computing. Student will also differentiate between Parallel and Distributed Paradigms.
CO471.3	Students will be able to gain the knowledge about virtualization and its needs in cloud computing. Students will be able to use the tools available for virtualization.
CO471.4	Students will be able to understand the security issues and recovery methods associated with cloud computing
CO471.5	Students will be able to write case studies on the tools available for industrial purpose to deploy clouds. Students will also develop understanding about cloud computing application areas.
70024	Information System Security Year of study 2019, 10
7C3ZA	Develop a basic understanding of cryptography, how it has evolved and some key encryption techniques used today. Develop an
CO472.1	understanding of security policies.
CO472.2	To master and implement different encryption algorithms
CO472.3	To master fundamentals of secret and public cryptography
CO472.4	Students will be able to understand message authentication protocols and hash functions.
CO472.5	To master protocols for security services
70024	Data Mining & Ware Housing Year of study 2019 10
/C35A	Data Winning & Wate Housing teat of study. 2010-13

	Student will be able to understand introduction to data mining, preprocessing data reduction.
CO473.2	Student will learn concept description and Association rule mining.
CO473.3	Student can understand classification and clustering.
CO473.4	Student will know Data Warehousing and its Architecture.
CO473.5	Student will understand OLAP, Aggregation, Backup and Recovery
7CS4A	Computer Aided Design for VLSI Year of study: 2018-19
CO474.1	Basic concepts in VLSI CAD with emphasis on physical design, synthesis and optimization of digital circuits.
CO474.2	Working of different methods for logical representation, manipulation and optimization for both combinational and sequential circuits.
CO474.3	General design process of modern VI SI chins.
CO474.4	Identify, formulate, design and synthesis problems related to digital circuits like adder, subtractor and FSM.
	Testing of CMOS layout using CAD tools and applying routing and placement alogorithm for optimization.
CO474.5	
7CS5A	Compiler Construction Year of study: 2018-19
CO475.1	Students will be able to learn major concepts in areas of language translation and compiler design.
CO475.2	Students will be able to ability to identify, formulate, and solve computer engineering problems with proper systematic & semantic approach.
CO475.3	Students will be able to Develop possible program constructs for further code generation with Type checking.
CO475.4	Students will be able to learn various concepts of symbol tables, Run time environments, memory management strategy.
CO475.5	Students will get the concepts of Intermediate code generation, Code optimization and Code generations.
7CS6A	Advance DataBase Management Systems Year of study: 2017-18
CO476.1	Basic knowledge of storing, querying and managing large amounts of data and the associated languages, tools and systems
CO476.2	Evaluate and Apply Advanced Database Development Techniques
CO476.3	Explain and evaluate the fundamental theories and requirements that influence the design of modern database systems
CO476.4	Design & Implement Advanced Database Systems.
CO476.5	To develop skills in advanced visual & conceptual modelling and database design
00014	Markila Commutina Vera of studio 2010-10
CO491 1	Students will be able to understand mobile computing and various adapitibility issues in it and mobility management
CO401.1	Students will be able to understand mobile computing and various adaptionity issues in it and mobility management.
CO481.2	Students will be able to really bata Dissemination and management and mobile cache maintenance sciences.
CO481.4	Students will be able to understand about Mobile IP and TCPdatabase systems in mobile environment and WWW and mobility
CO481.5	Students will be able to learn AD-Hoc network and various routing protocols and algorithms.
8CS2A	Digital Image Processing Year of study: 2018-19
CO482.1	
	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image.
CO482.2	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain.
CO482.2 CO482.3	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm.
CO482.2 CO482.3 CO482.4	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques .
CO482.2 CO482.3 CO482.4	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image
CO482.2 CO482.3 CO482.4 CO482.5	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image during detection process.
CO482.2 CO482.3 CO482.4 CO482.5 8CS3A	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image during detection process. Distributed Systems Year of study: 2018-19
CO482.2 CO482.3 CO482.4 CO482.5 8CS3A	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image during detection process. Distributed Systems Year of study: 2018-19 Students will be able to develop and apply knowledge of distributed system fundamentals, algorithms such as logical clock
CO482.2 CO482.3 CO482.4 CO482.5 <b>8CS3A</b> CO483.1	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image during detection process. Distributed Systems Year of study: 2018-19 Students will be able to develop and apply knowledge of distributed system fundamentals, algorithms such as logical clock synchronization and distributed system architecture. Students will be able to gain knowledge about message communication, remote procedure call and remote method invocation (RPC and
CO482.2 CO482.3 CO482.4 CO482.5 <b>8CS3A</b> CO483.1 CO483.2	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image during detection process. Distributed Systems Year of study: 2018-19 Students will be able to develop and apply knowledge of distributed system fundamentals, algorithms such as logical clock synchronization and distributed system architecture. Students will be able to gain knowledge about message communication, remote procedure call and remote method invocation (RPC and RMI). Students will be able to analyze load sharing and halancing algorithms and also describe Distributed file system characteristics
CO482.2 CO482.3 CO482.4 CO482.5 <b>8CS3A</b> CO483.1 CO483.2 CO483.3	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image during detection process.  Distributed Systems Year of study: 2018-19 Students will be able to develop and apply knowledge of distributed system fundamentals, algorithms such as logical clock synchronization and distributed system architecture. Students will be able to gain knowledge about message communication, remote procedure call and remote method invocation (RPC and RMI). Students will be able to analyze load sharing and balancing algorithms and also describe Distributed file system characteristics. Students will be able to develop knowledge about distributed systems using various techniques for tolerating partial failures and
CO482.2 CO482.3 CO482.4 CO482.5 <b>8CS3A</b> CO483.1 CO483.2 CO483.3 CO483.4	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image during detection process.  Distributed Systems Year of study: 2018-19 Students will be able to develop and apply knowledge of distributed system fundamentals, algorithms such as logical clock synchronization and distributed system architecture. Students will be able to gain knowledge about message communication, remote procedure call and remote method invocation (RPC and RMI). Students will be able to analyze load sharing and balancing algorithms and also describe Distributed file system characteristics. Students will be able to develop knowledge about distributed systems using various techniques for tolerating partial failures and deadlocks.
CO482.2 CO482.3 CO482.4 CO482.5 <b>8CS3A</b> CO483.1 CO483.2 CO483.3 CO483.4 CO483.5	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image during detection process.  Distributed Systems Year of study: 2018-19 Students will be able to develop and apply knowledge of distributed system fundamentals, algorithms such as logical clock synchronization and distributed system architecture. Students will be able to analyze load sharing and balancing algorithms and also describe Distributed file system characteristics. Students will be able to develop knowledge about distributed systems using various techniques for tolerating partial failures and dealocks. Students will be able to explain failure recovery model in distributed system, also summarizes replicated data management.
CO482.2 CO482.3 CO482.4 CO482.5 <b>8CS3A</b> CO483.1 CO483.2 CO483.3 CO483.4 CO483.5	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image during detection process. Distributed Systems Year of study: 2018-19 Students will be able to develop and apply knowledge of distributed system fundamentals, algorithms such as logical clock synchronization and distributed system architecture. Students will be able to analyze load sharing and balancing algorithms and also describe Distributed file system characteristics. Students will be able to develop knowledge about distributed systems using various techniques for tolerating partial failures and deadlocks. Students will be able to explain failure recovery model in distributed system, also summarizes replicated data management.
CO482.2 CO482.3 CO482.4 CO482.5 <b>8CS3A</b> CO483.1 CO483.2 CO483.3 CO483.4 CO483.5 <b>8CS4.2A</b>	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image during detection process. Distributed Systems Year of study: 2018-19 Students will be able to develop and apply knowledge of distributed system fundamentals, algorithms such as logical clock synchronization and distributed spatem architecture. Students will be able to analyze load sharing and balancing algorithms and also describe Distributed file system characteristics. Students will be able to develop knowledge about distributed systems using various techniques for tolerating partial failures and deadlocks. Students will be able to explain failure recovery model in distributed system, also summarizes replicated data management. Real Time Systems Year of study: 2018-19 Students will be able to explain failure recovery model in distributed system, also summarizes replicated data management.
CO482.2 CO482.3 CO482.4 CO482.5 <b>8CS3A</b> CO483.1 CO483.2 CO483.3 CO483.3 CO483.4 CO483.5 <b>8CS4.2A</b> CO484.1 CO484.2	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image during detection process.  Distributed Systems Year of study: 2018-19 Students will be able to develop and apply knowledge of distributed system fundamentals, algorithms such as logical clock synchronization and distributed system architecture. Students will be able to analyze load sharing and balancing algorithms and also describe Distributed file system characteristics. Students will be able to develop knowledge about distributed systems using various techniques for tolerating partial failures and deadlocks. Students will be able to explain failure recovery model in distributed system, also summarizes replicated data management.  Real Time Systems Year of study: 2018-19 Students will be able understand the basics of Real time System, concept of tasks & timing constraints. Case studies of appreal world software with the help of visual programming aids.
CO482.2 CO482.3 CO482.4 CO482.5 <b>8CS3A</b> CO483.1 CO483.2 CO483.3 CO483.4 CO483.5 <b>8CS4.2A</b> CO484.1 CO484.2 CO484.2 CO484.3	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image during detection process.  Distributed Systems Year of study: 2018-19 Students will be able to develop and apply knowledge of distributed system fundamentals, algorithms such as logical clock synchronization and distributed system architecture. Students will be able to analyze load sharing and balancing algorithms and also describe Distributed file system characteristics. Students will be able to develop knowledge about distributed systems using various techniques for tolerating partial failures and deadlocks. Students will be able to explain failure recovery model in distributed system, also summarizes replicated data management.  Real Time Systems Year of study: 2018-19 Students will be able understand the basics of Real time System, concept of tasks & timing constraints. Case studies of any real world software with the help of visual programming aids.
CO482.2 CO482.3 CO482.4 CO482.5 <b>8CS3A</b> CO483.1 CO483.2 CO483.3 CO483.4 CO483.5 <b>8CS4.2A</b> CO484.1 CO484.2 CO484.3 CO484.4	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to apply different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image during detection process. Distributed Systems Year of study: 2018-19 Students will be able to develop and apply knowledge of distributed system fundamentals, algorithms such as logical clock synchronization and distributed system architecture. Students will be able to analyze load sharing and balancing algorithms and also describe Distributed file system characteristics. Students will be able to develop knowledge about distributed systems using various techniques for tolerating partial failures and deadlocks. Students will be able to explain failure recovery model in distributed system, also summarizes replicated data management. Real Time Systems Year of study: 2018-19 Students will be able to explain failure recovery model in distributed system, also summarizes replicated data management. Real Time Systems Year of study: 2018-19 Students will be able to explain failure recovery model in distributed system, also summarizes replicated data management. Real Time Systems Year of study: 2018-19 Students will be able to explain failure with the help of visual programming aids. Students will be able to understand the basics of Real time System, concept of tasks & timing constraints. Case studies of any real world software with the help of visual programming aids. Students will be a
CO482.2 CO482.3 CO482.4 CO482.5 <b>8CS3A</b> CO483.1 CO483.2 CO483.3 CO483.4 CO483.5 <b>8CS4.2A</b> CO484.1 CO484.1 CO484.2 CO484.3 CO484.3	Students will be able to understand the fundamental steps involve in image processing, how image is acquired using different sensors and different color model used to represent image. Students will be able to analyze different types of transform function on image for sharpening and smoothing in spatial as well as in frequency domain. Students will be able to analyze different types of noise occurs in image during transmission and able to restore the image using inverse and homomorphism algorithm. Students will be able to develop encoder and decoder for compression of image using diffrent coding techniques . Students will be able to differentiate between line point and edge detection, how edges and boundaries are linked and segment the image during detection process.  Distributed Systems Year of study: 2018-19 Students will be able to gain knowledge about message communication, remote procedure call and remote method invocation (RPC and RMI). Students will be able to analyze load sharing and balancing algorithms and also describe Distributed file system characteristics. Students will be able to explain failure recovery model in distributed system, also summarizes replicated data management.  Real Time Systems Year of study: 2018-19 Students will be able to explain failure recovery model in distributed system, also summarizes replicated data management.  Real Time System System Sear of study: 2018-19 Students will be able to explain failure recovery model in distributed system, also summarizes replicated data management.  Real Time System Sear of study: 2018-19 Students will be able to explore Periodic Task scheduling and priority driven scheduling. Students will be able to explore Periodic Task scheduling and priority driven scheduling. Students will be able to explore Periodic Task scheduling. Students will be able to explore Periodic Task scheduling.