THIRD YEAR	
COURSE : 301	**INFORMATION THEORY AND CODING**
1	Apply information theory and linear algebra in source coding.
2	To unDesign channel performance using information theory.
3	To leaApply linear block codes for error detection and error correction .
4	Apply Cyclic codes for error detection and error correction .
5	Apply convolution codes for performance analysis.
COURSE : 302	**COMPLIER DESIGN**
1	Analyse the working of compiler by understanding its different phases.
2	Apply and implement different types of Parsing algorithms.
3	Evaluate between different types of Intermediate code generations.
4	Analyse different storage organization techniques.
5	Analyse different issues in the design of the code generator and basic block control flow graph.
COURSE : 303	**ADVANCED DATABASE MANAGEMENT SYSTEM**
1	Analyze the processes involved in query optimization which impact on
	database operation and design
2	Analyze the database functions and packages suitable for enterprise
	database application development and management
3	Evaluate alternative designs and architectures for databases.
4	Apply the database solutions for data access and its
	security measures.
5	Create the design of database systems for the solution of an
	applications.
COURSE : 304	**COMPUTER GRAPHICS AND MULTIMEDIA TECHNIQUES**
1	Analyze basic of principles computer graphics, the geometrical and mathematical problems with reference to computers and evaluate various algorithmic solutions.
2	Implement transformation methods and clipping algorithms.
3	Analyze algorithms of Hidden Lines and Surfaces to create curves.
4	Implementation various illumination models and color models.
5	Explore various multimedia and animation techniques.
COURSE : 305	**ANALYSIS OF ALGORITHM**
1	Evaluate the algorithm correctness and efficiency.
2	Apply Dynamic Programming to solve real time problems .

3	Formulation design and analysis of various pattern matching algorithms and of assignment problem.
4	Evaluate the randomized algorithm using Min-Cut, 2-SAT etc.
5	Identify behaviors of algorithms and the notion of various classes of algorithms.
COURSE : 306	**WIRELESS COMMUNICATION**
1	Analyze the Mobile radio propagation, fading, diversity concepts and the channel modeling.
2	Design cellular system and analyze technical challenges.
3	Apply the Digital Signaling concept for fading channels.
4	Apply the equalization techniques in wireless communication and calculate error probablity in fading channels
5	Analyze the design parameters, beam forming and MIMO systems.
COURSE : 307	**COMPUTER GRAPHICS AND MULTIMEDIA TECHNIQUES LAB**
1	Implement of program functions to draw different graphics primitives.
2	Analysis of various graphics drawing algorithms to draw basic objects of graphics.
3	Apply various transformations techniques on graphical objects.
4	Apply various clipping algorithms and then filling methods on various graphical objects.
5	Design and create a small applications in programming language.
COURSE : 308	**COMPILER LAB**
1	Identify different kinds of tokens and lexemes.
2	Analyze scanning by using the concept of finite state automation,parse tr
3	Deploy intermediate code for various statements in a programming language concept
4	Deploy heap structure for storage
5	Deploy various language patterns using lex tools they are also able to parse.
COURSE : 309	**ANALYSIS OF ALGORITHM LAB**
1	Analyse the complexity of the basic algorithms.
2	Apply sorting algorithms on real time problem.
3	Create binary search tree using various algorithms.
4	Implement minimum spanning tree algorithms
5	Explore Pattern matching algorithms.
COURSE : 310	**ADVANCED JAVA LAB**
1	Understand fundamentals of java,and tools for program designing environments.
2	Apply concept of overloading, inheritance and access controls to class.

3	Apply the concept of interfaces and importing the packages in java.
4	Design the application by handling files,Exceptions and threads.
5	Develop the applications using applets and design some polygons.
COURSE : 311	**DIGITAL IMAGE PROCESSING**
1	Analyze various steps of Digital Image processing.
2	Apply Image Transformation & Filtering techniques
3	Evaluate various methods of Image Restoration.
4	Evaluate concepts of Image Compression and segmentation
5	Analyze image segmentation and representation algorithms and techniques
COURSE : 312	**MACHINE LEARNING**
1	Apply supervised machine learning algorithms on real time data and make predictions.
2	Analyze unsupervised machine learning algorithms like clustering & association mining on real time data
3	Evaluate feature extraction & selection methods and select appropriate machine learning model.
4	Analyze various semi supervised learning & reinforcement learning algorithms.
5	Apply advance concepts like recommender system and deep learning.
COURSE : 313	**INFORMATION SYSTEM SECURITY**
1	Analyse different cryptography techniques transposition and substitution methods.
2	Apply AES, RC6, random number generation. S-box theory
3	Analyze Public key Cryptosystem using RSA and also learn various techniques used for the distribution of key in public key cryptosystem
4	Analyze Message authentication and hash function using MD5 and SHA and also learn the concept of digital signature.
5	Apply the IP security and password message protocols..
COURSE : 314	**COMPUTER ARCHITECTURE AND ORGANIZATION**
1	Implement register transfer with the help of micro operations.
2	Analyze basic of computer organization, instructions, RISC & CISC characteristics.
3	Apply integer and floating type computer arithmetic techniques .
4	Analyze basics of memory organization, allocation and management schemes.
5	Assess modes of transfer and input output interface, interrupts and DMA processing.
COURSE : 315	**ARTIFICIAL INTELLIGENCE**

1	Analyze different approaches of AI important AI techniques, including in particular search, knowledge representation, planning and constraint management
2	Interpret the modern view of AI as the study of agents that receive percepts from the environment and perform actions.
3	Explore awareness of AI facing major challenges and the complexity of typical problems within the field.
4	Assess critically the techniques presented and apply them to real world problems.
5	Apply advance approach of AI such as intelligence system and expert system.
COURSE : 316	**CLOUD COMPUTING**
1	Exhibit the evolution of Cloud computing and its applications.
2	Analyse the Design,Architecture of cloud and its models
3	Evaluation of Virtualization Technology, Data Centers and their applications in cloud computing
4	Develop up the awareness of security on Data , Data Centre and Cloud services.
5	Assess an cloud services on AWS, GoogleApp Engine etc , Integrating with cloud applications.
COURSE : 317	**DISTRIBUTED SYSTEM**
1	Exploration and understanding various architectures used to design distributed systems along with different types of operating systems.
2	Analysis of concurrent programming with interprocess communication techniques, such as remote method invocation, remote events.
3	Analysis of various distributed file systems through case studies.
4	Analysis of distributed shared memory models and their failures in distributed computation.
5	Analyze various faults and their consequences and replicated data management through exploration different types of Distributed Systems
COURSE : 318	**DIGITAL IMAGE PROCESSING LAB**
1	Apply image enhancement operation and image Arithmetic Operations on a given image
2	Evaluate image restoration and Histogram Processing on various images
3	Analyze various Noise and filtering algorithms on images
4	Implement image restoration and segmentation techniques on an image
5	Extract features of an image and apply pattern recognition techniques
COURSE : 319	**MACHINE LEARNING LAB**
1	Identify the characteristics of machine learning to solve real-world problems.
2	Apply appropriate data sets to the Machine Learning algorithms

3	Design Python programs for supervised learning for classification and unsupervised algorithms for clustering.
4	Develop Python programs to apply neural networks for learning non-linear functions.
5	Apply Machine Learning algorithms to solve real world problems
COURSE : 320	**PYTHON LAB**
1	Explore basic data types in python.
2	Apply decision control programs using if-else, while , for loop.
3	Apply various functions to manipulate string .
4	Apply functions and file handling.
5	Implement various sorting algorithms on different scenarios.
COURSE : 321	**MOBILE APPLICATION DEVELOPMENT LAB**
1	Apply essential Android Programming concepts.
2	Develop various Android applications related to layouts & rich uses interactive interfaces
3	Develop Android applications related to mobile related server-less database like SQLITE.
4	Implement an application that writes data to the SD card.
5	Create mini application of Android studio.