Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

B.Tech Third Semester Course Outcomes (CBCS)

Subject: Mathematics-III

Course Outcomes:

CO1: Solve mathematical model with Laplace Transform and error functions and their applications.

CO2: Make use of Fourier transforms and Z - transforms to analyze wave forms of periodic functions & non periodic functions

CO3: Solve problems in engineering domain related to Linear Algebra using matrices

CO4: Develop problem solving techniques needed to accurately calculate probabilities and describe the properties of discrete and continuous distribution functions.

CO5: Compute correlations; Apply the tests of goodness of fit.

Subject: Digital Circuits and Fundamentals of Microprocessor

Course Outcomes:

CO1: Understand the concepts of realization of Boolean functions using various combinational logic design

CO2: Analyze & design digital combinational logic circuits

CO3: Illustrate memory elements & design used in sequential logic design

C04: Classify different logic families, memory devices and PLDs

CO5: Describe the internal working of 8085microprocessor and AL programming Concepts in 8085 microprocessor with examples

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Object Oriented Programming

Course Outcomes:

CO1: Realize the difference between the top-down and bottom-up approach along with thinking in terms of objects.

CO2: Explain programming fundamentals, including statement and control flow and recursion.

CO3: Analyze the given problem keeping in mind object oriented approach

CO4: Apply the object-oriented concepts during the development of solution

CO5: Illustrate the use of static and run time binding, error handling mechanism

Subject: Introduction to Computer Networks

Course Outcomes:

CO1: Describe the basics of network and its hardware components

CO2: Explain the different network models

CO3: Interpret the various functions and protocols of network models.

CO4: Distinguish different transmission media with its connectors. BE i

CO5: Summarize the concepts of network security and privacy.

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Theory of Computation

Course Outcomes:

CO1: Explain fundamental properties of formal languages and formal grammars, deterministic and nondeterministic finite automata and types of languages and types of finite automata.

CO2: Compare deterministic and nondeterministic finite automata and deterministic finite automata and Explain fundamental construction of Mealy and Moore Machine.

CO3: Prove the equivalence of languages described by finite state machines and regular expressions and able to construct regular grammar from finite automata and vice versa.

CO4: Apply logic using context-free languages, context-free grammars.

CO5: Construct push-down automata, Turing machines and identify decidability and recursive enumerability.

Subject: Universal Human Values

Course Outcomes:

CO1: Expected to become more aware of themselves, and their surroundings (family, society, nature)

C02: Become more responsible in life, and in handling problems with sustainable solutions, while keeping human relationships and human nature in mind.

CO3: Handle better critical ability.

CO4: Become sensitive to their commitment towards what they have understood (human values, human relationship and human society).

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

B.Tech Fourth Semester Course Outcomes (CBCS)

Subject: Discrete Mathematics and Graph Theory

Course Outcomes:

CO1: Apply graph theory models of data structures and state machines to solve problems of connectivity and constraint satisfaction.

CO2: How mathematical models for engineering are designed, analyzed and implemented in industry and organizations.

CO3: Mathematically identify basic data types and structures (such as numbers, sets, graphs, and trees) used in computer algorithms and systems; distinguish rigorous definitions and conclusions from merely plausible ones.

CO4: Analyze real world scenarios to recognize when Logic, sets, functions are appropriate, formulate problems about the scenarios, creatively model these scenarios (using technology, if appropriate) in order to solve the problems using multiple approaches.

CO5: Apply knowledge of mathematics, physics and modern computing tools to scientific and engineering problems and in life-long learning.

Subject: Web Technology

Course Outcomes:

CO1: Design web page using HTML tag, HTML forms, frame & frame sets

CO2: Describe and create the web page layout using CSS

CO3: Distinguish in HTML and XML & design dynamic websites

CO4: Summarize validation, controls and graphics

CO5: Apply the concept for deployment of websites and its security issues.

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Operating System

Course Outcomes:

CO1: Describe the concept of operating system and file system

CO2: Explain process management and evaluate process scheduling algorithms.

CO3: Describe process synchronization and apply the knowledge to solve problem

CO4: Describe and compare methods for handling deadlocks and secondary storage structures.

CO5: Describe and solve the problems of memory management along with security

Subject: Data Structures

Course Outcomes:

CO1: Understand the basic concept of data structures and time complexity.

CO2: Solve the problems and demonstrate using searching and sorting algorithms using programming language.

CO3: For given problem of stack and queues implement it and analyze the same to determine the time and computation complexity.

CO4: Classify & demonstrate the use of different data structures like linked list, trees & graphs along with related algorithms.

CO5: Infer the use of symbol tables for hashing and collision resolution.

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Computer Architecture and Organization

Course Outcomes:

CO1: Understand computer system and its fundamental architecture.

CO2: Solve various computer arithmetic problems.

CO3: Understand functionalities and organization of processor and measures to improve its performance.

CO4: Understand 1/0 device interfacing and computer memory hierarchy.

CO5: Understand various methods in parallel organization of processor

Subject: System Programming

CO1: Distinguish among different system programs and how assembler works. Tell the implementation of two pass assembler.

CO2: Relate among different features of Macro's and to simplify the process of macro implementation.

CO3: Demonstrate the working of loader and to compare and contrast among different loading schemes.

CO4: Demonstrate the working of compiler by categorizing it into different phases

CO5: To demonstrate driver installation routines and to compare device drivers for different operating systems.

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

B.Tech Fifth Semester Course Outcomes (CBCS)

Subject: Database Management System

Course Outcomes:

CO1: Explain the architecture and functioning of databases management systems as well as associated tools and techniques. Compare file processing systems and DBMS.

CO2: Illustrate database query and manipulation language such as SQL (Structured Query Language) and interpret real problem with SQL query.

CO3: Classify various data models and construct Entity relationship diagram. Apply normalization form to convert database tables into normal forms.

CO4: Query Processing and Query Optimization Measure of query cost for various Operators.

CO5: Transaction Management: Explain role of various components in the transaction management.

CO6: Understand the concept of Concurrency Control System.

Subject: Computer Graphics

Course Outcomes:

CO1: Understand the basics of computer graphics and different graphics system. Apply and compare the algorithms for drawing 2d images also explain aliasing & anti-aliasing.

CO2: Apply and compare the Polygon Filling Algorithms.

CO3: Solve the problems on viewing transformations. Analyze and apply clipping algorithms.

C04: Analyze and apply transformation on 2d & Explain the projection 3D Graphics.

CO5: Explain the hidden surface removal, Curves and surface rendering algorithms.

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Java Programming

Course Outcomes:

CO1: Analyze the necessity for object oriented programming paradigm over structured programming and become familiar with the fundamental concepts in OOP like encapsulation.

CO2: Design and develop java programs, analyze and interpret object oriented data and report results.

CO3: Design an object oriented system, AWT components and multithreaded processes as per needs and specifications.

CO4: It help to succeed in competitive examinations like GATE, Engineering services, Technical interviews etc.

CO5: Plan their career in java based technologies like HADOOP etc.

Subject: Microcontrollers & Applications (Elective-I)

Course Outcomes:

CO1: Understand the difference between microprocessor and microcontrollers.

CO2: Analyze the architecture of 8085 microcontroller.

CO3: Develop programs in assembly language.

CO4: Interface peripherals to microcontroller.

CO5: To impart the basic concepts of serial communication in 8051.

CO6: Illustrate the use of microcontroller in different applications.

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Arificial Intelligence (Elective-I)

Course Outcomes:

CO1: To design a plan for the real world problems and mapping it to the digital world.

CO2: To identify problems that are amenably solved by AI methods.

CO3: To apply the different knowledge representation for solving the problems.

CO4: To apply the various planning strategies for real world problems.

CO5: To identify the uncertainty of solution to any problems and resolve it.

Subject: Software Enginnering (Elective-I)

Course Outcomes:

CO1: To compare and select a process model for a business system.

C02: To identify and specify the requirements for the development of an application.

CO3: To develop and maintain efficient, reliable and cost effective software solutions.

CO4: To critically think and evaluate assumptions and arguments of the client.

CO5: To understand the different software testing.

CO6: To understand the risk management and quality of software.

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Effective Technical Communication

Course Outcomes:

CO1: Acquire knowledge of structure of language.

CO2: Be able to face competitive exams and the interview process and can become employable.

CO3: Develop business writing skills.

CO4: Become familiar with technology enabled communication and can develop technical and scientific writing skills.

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

B.Tech Sixth Semester Course Outcomes (CBCS)

Subject: Design and Analysis of Algorithms

Course Outcomes:

CO1: To design and analyse the time and space complexity for any algorithm

CO2: Apply the design techniques of algorithm in solving real life problems

CO3: Apply the design techniques of algorithm using dynamic programming in solving real life problems

CO4: Perform amortize analysis for any algorithm

CO5: Understand NP class of problems and propose approximation algorithms for the same

Subject: TCP/IP

Course Outcomes:

CO1: Understand the basics concept of internetworking.

CO2: Comprehend the various address resolution protocols.

CO3: Use and adapt the IP layer protocols.

C04: Understand the concept of Transmission control protocol.

CO5: Apply the security to the IP layer.

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Human Computer Interaction (Elective-II)

Course Outcomes:

CO1: Describe the capabilities of both humans and computers

CO2: Design effective dialog for HCI

CO3: Identify the stake holder's requirements and choose the appropriate models

CO4: Develop mobile HCI using mobile elements and tools

CO5: Design Web Interfaces using different techniques.

Subject: Internet of things (Elective-II)

Course Outcomes:

CO1: Students will be able to analyze the development of computers

CO2: Students will be able to identify the concept of CISC and RISC architecture

CO3: Students to understand Microprocessor, memory and its interfacing

Subject: Soft Computing (Elective-II)

Course Outcomes:

CO1: Recognize the feasibility of applying a soft computing methodology for a particular problem

CO2: Apply Fuzzy logic and reasoning to handle uncertainty and solve engineering problems

CO3: Apply Neuro fuzzy modeling techniques to solve engineering problems.

CO4: Apply genetic algorithms to combinational optimization problems.

CO5: Apply swarm optimization techniques to solve the particular problem

Subject: Distributed Computing (Elective-III)

Course Outcomes:

CO1: To develop and apply knowledge of distributed computing.

CO2: Deign a model of distributed computation.

CO3: To understand the concept of logical and global time for message communication.

CO4: To analyze the terminology of distributed algorithm.

CO5: To apply the knowledge of termination detection algorithm.

Subject: Machine learning (Elective-III)

Course Outcomes:

CO1: Solve typical machine learning problems

C02: Represent data to facilitate learning.

CO3: Design and implement various machine learning algorithms for real world applications.

CO4: Suggest supervised/unsupervised machine learning approaches for any applications.

CO5: Handle tools of machine learning.

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Data Warehousing & Mining (Elective-III)

Course Outcomes:

CO1: Understand the need, definition, applications, components, processes & Architecture of Data Warehouse.

CO2: Learn business requirements, dimensional modeling for designing database schemas for a Data Warehouse.

CO3: Understand Data and Data Mining Principles

CO4: Illustrate frequent pattern mining methods, such as Apriority, ECLAT and Growth.

CO5: Identify appropriate data mining techniques for classification and prediction

Subject: Digital Image Processing (Open Elective-I)

Course Outcomes:

CO1: Discuss digital image fundamentals

CO2: Apply image enhancement and restoration techniques.

CO3: Use Image compression and segmentation techniques.

C04: Represent features of images.

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Mobile Computing (Open Elective-I)

Course Outcomes:

CO1: Students will be able to analyze the mobile networking.

CO2: Students will be able to identify the issues involved in it.

CO3: Students to understand methods used in mobile computing

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

B.Tech. Seventh Semester Course Outcomes (CBCS)

Subject: Cryptography and Network Security

Course Outcomes Theory:

CO1: To understand basics of Cryptography and Network Security and classify the symmetric encryption techniques.

CO2: Understand, analyze and implement the symmetric key algorithm for secure transmission of data.

CO3: Acquire fundamental knowledge about the background of mathematics of asymmetric key cryptography and understand and analyze asymmetric key encryption algorithms and digital signatures.

CO4: Analyze the concept of message integrity and the algorithms for checking the integrity of data

CO5: To understand various protocols for network security to protect against the threats in the networks.

Course Outcomes Practical:

CO1: Acquire knowledge about Security goals, background of cryptographic mathematics and identification of its application

CO2: Understand, analyze and implement the symmetric key algorithm

CO3: Acquire knowledge about the background of mathematics of asymmetric key cryptography and understand and analyze asymmetric key encryption algorithms, digital signatures

CO4: Analyze the concept of message integrity and the algorithms tor checking the integrity of data.

CO5: Understand and analyze the existing cryptosystem used in networking

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Deep Learning

CO1: Understand basic of deep learning algorithms

CO2: Represent feed forward Neural Network

CO3: Evaluate the performance of different deep learning models with respect to the Optimization, bias variance trade-off, over fitting and underfittirig.

CO4: Apply the convolution networks in context with real world problem solving.

CO5: Apply recurrent neural networks in context with real world problem solving.

Subject: Blockchain Technology

CO1: Describe the basic concepts and technology used for blockcbain.

CO2: Describe the primitives of the distributed computing and cryptography related to blockchain.

CO3: Illustrate the concepts of Bitcoin and their usage.

CO4: Implement Ethereum block chain contract.

CO5: Apply security features in blockchain technologies and Use smart contract in real world applications.

Subject: Augmented & Virtual Reality

CO1: Understand the basics of Augmented and Virtual reality systems with the help of input and output devices

CO2: Summarize the basic concepts and hardware & software of Augmented Reality system

CO3: Analyze manipulation, navigation and interaction of elements in the virtual world using tools.

CO4: Apply the concept of technology in the real world applications of entertainment.

CO5: Accept the challenges in applications of augmented rind virtual reality.

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Salesforce Technology

CO1: Develop skills in configuring and managing Salesforce orgs.

CO2: Understanding Salesforce Data Management

CO3: Implementing automation Security and debugging data.

CO4: Acquire programming skills in Apex. Salesforce's programming language.

CO5: Enable to extend and customize Salesforce to meet specific business requirements.

Subject: Compiler Design

CO1: Define the compiler along with the phases und basic program in LEX

CO2: Understand the parser and its types i.e. top-Down and Bottom-up parsers and constriction of parsing table.

CO3: Implement program based on concept of type checking, parameter passing Overloading.

CO4: Implement the concept of Code Optimizations and Code Generations.

CO5: Understand the concepts of Object Oriented in Compilers.

Subject: Natural Language Processing

CO1: Understand the basic concepts and applications of Natural Language Processing (NSP)

CO2: Identify the challenges in NLP and evaluate the solutions to these challenges

CO3: Analyze and preprocess text data for NLP tasks

CO4: Apply different NLP techniques and algorithms such as text classification, information retrieval and extraction, syntactic and semantic analysis, and deep learning models

CO5: Evaluate and compare different NLP techniques and algorithms using appropriate metrics

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Introduction to Software Testing

CO1: Understand the role of software testing and quality assurance

CO2: Acquire the knowledge of test case strategies using white and black box approach

CO3: Understand and apply the different levels of testing

CO4: Develop & analyze the software testing process & management skills

CO5: Develop & evaluate the software testing tools for commercial applications.

Subject: The Joy of Computing using Python

CO1: Develop proficiency in Python programming language and apply it to solve computational problems.
CO2: Use data structures and libraries in Python to manage data and perform advanced data analysis tasks.
CO3: Design and analyze algorithms to solve problems efficiently and effectively.
CO4: Apply problem-solving strategies and techniques using Python to solve real-world problems.
CO5: Demonstrate knowledge of advanced Python topics and their applications in various domains.

Subject: Database Management System

CO1: Understand the basics of DBMS to analyze an information problem in the form of an Entity relation diagram and design an appropriate data model for it.

CO2: Demonstrate basics of File organizations and its types

CO3: Interpret functional dependencies and various normalization forms

CO4: Perform basic transaction processing and management

CO5: Demonstrate SQL queries to perform CRUD (Create, Retrieve, Update, and Delete) operations on database

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Data Visualization

CO1: Apply statistical method for Data visualization.

CO2: Gain knowledge on R and Python

CO3: Understand usage of various packages in R and Python.

CO4: Demonstrate knowledge of Watson studio.

CO5: Apply data visualization tools on various data sets.

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

B.Tech. Eighth Semester Course Outcomes (CBCS)

Subject: Social Networks

CO1: Learn social networks, its type and representation

CO2: Understand weak ties, strong and weak relationships, homophily and calculate

CO3: Analyse links

CO4: Understand power laws and Rich-Get-Richer Phenomena

CO5: Understand Small World Phenomena

Subject: Reinforcement Learning

CO1: Understand Bandit algorithm and its mathematical formulation.

CO2: Use dynamic programming for reinforcement learning

CO3: Perform function approximation and apply LSM

CO4: Fit Q, DQN & Policy Gradient for Full RL

CO5: Use combinational models for complex problems

Subject: GPU Architecture and Programming

CO1: Understand conventional CPU Architectures, their extentions for single instruction multiple data processing (SIMD).

CO2: Program in CUDA about data space and synchronization

CO3: Apply optimization on kernals, treads etc

CO4: Learn Basics of OpenCL

CO5: Design an application using neural networks

Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Nagpur-Katol Highway Road, Khapri (Kothe),
Tal: Kalmeshwar, Nagpur, Maharastra-441501
Department of Computer Engineering

Subject: Predictive Analytics Regression an Classification

CO1: To understand predictive models, LSM, Normal equations and GMT

CO2: Understand regression models and infers its statistical inference

CO3: Check model assumptions and bias variance tradeoff

CO4: Perform regression analysis in various programming languages

CO5: Apply regression models and classification for predictive analysis

Subject: Data Analytics Using Python

CO1: Understand data analytics and python fundamentals

CO2: Perform sampling using various methods and perform hypothesis test or ANOVA test

CO3: Fit linear regression model and calculate various errors

CO4: Apply ROC

CO5: Apply clustering and classification using python programming

Subject: Cloud Computing

CO1: Understand on-demand computing service for shared pool of resources, namely servers, storage, networking, software, database, application etc.

CO2: Understand cloud model for enabling ubiquitous, on-demand access to a shared pool of configurable computing resources, which can be rapidly provisioned and released with minimal management effort.

CO3: Create a cloud and use cloud simulator software's

CO4: Perform VM resource management and cloud for edge enabled analytics.

CO5: Practice cases studies and understand advanced research areas