B.C.A. Part - I (Semester - I)

Course Code: CC 101 Fundamentals of Computer

Course Outcomes

- 1. Understand basic concepts of computer.
- 2. Describe peripheral devices and number systems.
- 3. Understand operating environment
- 4. Demonstrate the use of Linux Operating system commands

Course Code: CC 102 Introduction to Programming using 'C'

Course Outcomes

- 1. Able to implement the algorithms and draw flowcharts for solving Mathematical problem.
- 2. Ability to design and develop Computer programs, analyzes, and interprets the concept of pointers, declarations, initialization, operations on pointers and their usage.
- 3. Able to define data types and use them in simple data processing applications also he/she must be able to use the concept of array of structures and file Handling.
- 4. Develop confidence for self education and ability for life-long learning needed for computer language

Course Code: ACE 103 Principles of Management

- 1. Understand the influence of historical forces on current practice of management.
- 2. Understand frameworks in the four functions of management.
- 3. Understand leadership styles to anticipate the consequences of each leadership style
- 4. Be able to identify and apply appropriate management techniques for organizations

Course Code: ACE 104 Business Communication

Course Outcomes

- 1. Communicate in English in written as well as oral mode
- 2. Make presentations in English
- 3. Do effective business correspondence.
- 4. To demonstrate his/her ability to write error free while making an optimum use of correct Business Vocabulary & Grammar.

Course Code: AEC105 Office Automation

Course Outcomes

- 1. Understand the components of office automation
- 2. Perform operations using MS Word and PowerPoint
- 3. Surf details through Internet
- 4. Understand and discuss about the use of Office Package and internet in daily life

Course Code: CCL 106 Lab Course -I Based on CC102

Course Outcomes

- 1. Understand and trace the execution of programs written in C language.
- 2. Write the C code for a given algorithm
- 3. Implement Programs with pointers and arrays, perform pointer arithmetic and file handling.
- 4. Write programs that perform operations using derived data types.

Course Code: CCL 107 Lab Course-II Based on AEC 105

- 1. Use internet and internet tools.
- 2 .Perform operations using MS Word and PowerPoint

- 3. Create business presentations using PowerPoint
- 4. Understand of the role of computers in business, education and society.

B.C.A. Part - I (Semester - II)

Course Code: CC201 Database Management System

Course Outcomes

- 1) Describe the basic concepts of DBMS and various databases used in real applications.
- 2) Demonstrate the principles behind systematic database design approaches.
- 3) Design the database structure by applying the concepts of Entity relational model and Normalization.
- 4) Learn MS-Access for database creation and handling transactions.

Course Code: CC202 Operating System

Course Outcomes

- 1) Possess knowledge of Operating Systems and their types.
- 2) Apply the concept of a process and scheduling algorithms.
- 3) Realize the concept of deadlock and different ways to handle it.
- 4) Understand various memory management techniques and file system.

Course Code: CC 203 Object Oriented Programming Using C++

- 1) Understand object-oriented programming and advanced C++ concept.
- 2) Apply the concepts of object, classes and constructor.
- 3) Design C++ Programs based on object, class, inheritance, abstraction, encapsulation, dynamic binding and polymorphism.

4) Implement concept of polymorphism in program

Course Code: AEC 204 Financial Accounting with Tally

Course Outcomes

- 1. Use basic accounting terminology, procedures and systems of maintaining accounting records.
- 2. Understand financial statements
- 3. Learn to create company, enter accounting voucher entries and also print financial statements, etc. in Tally.
- 4. Demonstrate MIS reports in Tally ERP.

Course Code: AEC 205 Mathematical Foundations for Computer Applications

Course Outcomes

- 1) Basic knowledge of set theory, functions and relations concepts, matrix needed for designing and solving problems.
- 2) Construct simple mathematical proofs and possess the ability to verify them.
- 3) Write an argument using logical notation and determine if the argument is valid or is not valid.
- 4) Use graph algorithms to solve problems

Course Code: CCL 206 Lab Course-III Based on CC201 and AEC 204

- 1) Use MS-Access DBMS and design database
- 2) Perform operations on data using MS access features
- 3) Create company using Tally ERP
- 4) Perform accounting using Tally ERP

Course Code: CCL 207 Lab Course-IV Based on CC 203

- 1) Understand the difference between the top-down and bottom-up approach
- 2) Describe the object-oriented programming approach in connection with C++
- 3) Apply the concepts of object-oriented programming
- 4) Illustrate the process of data file manipulations using C++

B.C.A. Part - II (Semester - III)

Course Code: CC301 RDBMS

Course Outcomes

- 1. Describe the fundamental elements of Relational Database Management Systems.
- 2. Explain various commands, sub queries & joins in MySQL with example.
- 3.Enhance programming skills and techniques using MySQL and PL/SQL
- 4.To solve database problems using MySQL and PL/SQL by using Cursors and Triggers

Course Code: CC302 Computer Network and Internet

Course Outcomes

- 1. Understand the concept of computer network.
- 2. Identify different components required to build different networks.
- 3. Recognize the functions of network layers and different protocols.
- 4. Discuss the important features of the Internet and Web.

Course Code: CC303 Data Structure using C

Course Outcomes

- 1. Use and implement appropriate data structure for the required problems using a programming language such as C.
- 2. Understandvarious searching & sorting techniques.
- 3. Implementing various data structures Stacks, Queues
- 4.Implementation of Linked Lists and Trees

Course Code: AEC304 Elements of Statistics

- 1) Represent the data in pictorial and graphical form.
- 2) Describe and understand the data with the help of various measures of data.

- 3) Analyze bivariate data.
- 4) Understand the concept of probability and probability distributions.

Course Code: AEC305 Human Resource Management and Materials Management

Course Outcomes

- 1. Understand HR Management and planning.
- 2. Describe process of Appraisal/training and Development.
- Recognize integrated approach to Material Management and computer applications in Material Management.
- 4. Demonstrate 5 R in purchasing and Inventory control techniques.

Course Code: CCL306 Lab Course V Based CC301

Course Outcomes

- 1. Design database for business applications and Use of queries
- 2. Apply advanced SQL features and Analyze PL/SQL structures.
- 3. Discuss normalization techniques with simple examples.
- 4. Describe transaction processing and concurrency control concepts.

Course Code: CCL307 Lab Course VI based on CC303

Course Outcomes

- 1. Implement various data structures Like Stacks, Queues, Linked Lists.
- 2. Applying various searching techniques using data structure.
- 3. Ability to implement linear and non-linear data structure operations using C programs
- 4. Ability to solve problems implementing appropriate data structures

Course Code: SECSB308 Skill Development III

- 1. Enhance Self Understanding
- 2. Understand Business Etiquette and Manners

- 3. To develop and nurture the soft skills of the students through individual and group activities.
- 4. To expose students to right attitudinal and behavioral aspects and to build the same through activities

B.C.A. Part - II (Semester - IV)

Course Code: CC401 Object Oriented Programming Using C++

Course Outcomes

- 1) Understand object-oriented programming and advanced C++ concept.
- 2) Apply the concepts of object, classes and constructor.
- Design C++ Programs based on object, class, inheritance, abstraction, encapsulation, dynamic binding and polymorphism.
- 4) Implement concept of polymorphism in program.

Course Code: CC402 Software Engineering

Course Outcomes

- 1. Understand life cycle models, requirement elicitation techniques, understand the concept of analysis and design of software.
- 2. Develop SRS document.
- 3. Use of analysis and design tools for system development.
- 4. Apply software engineering concepts in software development to develop quality software.

Course Code: CC403 PHP

- 1. Understand the basics of PHP programming language and its role in web development.
- 2. Implement functions and arrays in PHP to solve programming problems.
- 3. Design web forms using HTML and process user input using PHP.
- 4. Execute file uploads and perform file handling operations in PHP applications.

Course Code: AEC404 Entrepreneurship Development

Course Outcomes

- Define characteristics, function and types of entrepreneurs and know the role of Entrepreneurship in Economic Development. They should know the importance of women entrepreneurs.
- 2. Identify Business Opportunities and prepare business plan
- 3. Know project finance agencies.
- 4. Understand New Opportunities and Challenges in digital entrepreneurship

Course Code: AE405 Enterprise Resource Planning (ERP)

Course Outcomes

- 1. Understand concept, need and significance of ERP
- 2. Learn different concept regarding ERP implementation
- 3. Understand ERP models and related technologies
- 4. Describe popular products and future trends in ERP.

Course Code: CCL 406 Lab Course-VII Based on CC401

Course Outcomes

- 1. Apply the concepts of object-oriented programming
- 2. Illustrating the functions, objects and process of data manipulations using C++.
- 3. Classify inheritance with the understanding of early and late binding, usage of exception handling, generic programming.
- 4. Demonstrate the use of various OOPs concepts with the help of programs.

Course Code: CCL 407 Lab Course-VIII based on CC-403

Course Outcomes

1. Acquire the ability to analyze problems, design algorithms and implement solutions using PHP.

- 2. Develop the ability to design and implement PHP programs that interact with user inputs, perform calculations and generate dynamic web contents.
- 3. Create PHP scripts capable of inserting and modifying data in a MySQL database.
- 4. Design web pages with the ability to retrieve and present data from a MySQL database.

Course Code: AEC408 Mini Project

- 1. Implement fundamental domain knowledge of core courses for developing simple business applications.
- 2. Utilize the software development techniques, skills and modern tools.
- 3. To provide students for knowledge of Electronics Components and soldering techniques and its package information for electronics circuit design.
- 4. Knowledge for the assembling of electronics circuit with components on PCB (Printed Circuit Board) of circuit design

B.C.A. Part - III (Semester - V)

Course Code: CC501 Java Programming

Course Outcomes

- 1. Understand the features of Java Language
- 2. Demonstrate Object-Oriented Programming using Java
- 3. Develop Multithreaded and Networking applications
- 4. Design GUI applications using AWT and Swing.

Course Code: CC502 Data Warehousing and Data Mining

Course Outcomes

- 1. Define the Data warehouse architecture and its Implementation.
- 2. Describe the Architecture of a Data Mining system.
- 3. Understand the various Data preprocessing Methods.
- 4. Perform classification and prediction of data

Course Code: CC503 IT Security

- 1. Understand the concept and need of IT security
- 2. Identify different security threats to information systems.
- 3. Describe security controls used for IS security.
- 4. Understand provisions in IT Act 2000 and Design Security policy for IT Enabled Organization.

Course Code: CC504 Python Programming

Course Outcomes

- 1. Acquire programming skills in core Python.
- 2. Develop Python programs with conditionals and loops.
- 3. Understand advance data types in Python Programming.
- 4. Develop problem solving skills and their implementation through Python.

Course Code: CC505 Digital Marketing

Course Outcomes

- 1. Learn the applications of Digital Marketing
- 2. Analyze the different digital marketing avenues.
- 3. Examine digital marketing tools.
- 4. Build real life problems in the domain of digital marketing.

Course Code: CCL 506 Lab Course IX based on CC501

Course Outcomes

- 1. Implement the Concept of OOP in Java through simple programs.
- 2. Implementation and Evaluation of concept related to class and inheritance, concept of Multiprogramming and Exception Handling.
- 3. Able to write programs using abstract classes.
- 4. Able to write multithreaded programs

Course Code: CCL 507 Lab Course-X Based on DSE504

- 1. Demonstrate and use different Data types in Python.
- 2. Apply various built looping statements and Modules provided by Python.

- 3. Determine the methods to create and manipulate Python programs by utilizing the data structures like lists, dictionaries, tuples and sets.
- 4 Identify the commonly used operations involving file systems and regular expressions.

B.C.A. Part - III (Semester - VI)

Course Code: CC 601 Cloud Computing

- 1. Understand the fundamental principles of Cloud Computing.
- 2. Understand the importance of virtualization in distributed computing and how this has enabled the development of Cloud Computing.
- 3. Explain the core concepts of the cloud computing paradigm: how and why this paradigm shift came about, the characteristics, advantages and challenges brought about by the various models and services in cloud computing.
- 4. Describe cloud computing applications

Course Code: DSE 602 Android Programming

- 1: Understand the building blocks of Mobile Operating Systems
- 2: Analyze different elements of Android Development Environment
- 3: Illustrate the structure of Mobile Applications using Android
- 4: Identify different components used in Mobile Applications using Android

Course Code: GE 603 M – Commerce

- 1) Understand the concepts and scope of E- Commerce.
- 2) Differentiate between m commerce and E-Commerce.
- 3) Describe M commerce applications in industry.
- 4) Explain security issues and control measures in M-commerce.

Course Code: AEC 604 Soft Skills & Personality Development

- 1. Reflect on the importance of Professional behavior.
- 2. Articulate and adapt the various facets that make up one's personality.
- 3. Demonstrate knowledge of personal beliefs and values and a commitment to continuing personal reflection and reassessment.
- 4. Learn to balance confidence with humility and overcome problems associated with personality

Course Code: AEC 605 Industrial Visit

- 1. Linking existing knowledge with learning experience
- 2. Examining the gap between classroom theoretical training and practical learning in a reallife environment.
- 3. Provides an insight into the real working environment of the industry.
- 4. Helps them to see their future place in the working world.