DEPARTMENT OF B.C.A. (SCIENCE)

BCA(Science)
Course Outcome:
T. Y. BCA(Science) SEMESTER V

BCA 351: DSE I (Programming in Java):

After successful completion of this course, students will be able to:

CO1: To learn implementation of object-oriented concepts with Java.

CO2: To understand collection classes and interfaces.

CO3: To know the process of application development using Graphical User Interface (GUI).

CO4: To acquire knowledge about handling databases using Java.

CO5: To study web components for developing web applications.

BCA 352: DSE II - Data Mining and Data Science:

After successful completion of this course, students will be able to:

CO1: Identify the key processes of data mining, data warehousing and knowledge discovery

CO2: Design data warehouse with dimensional modeling and apply OLAP operations.

CO3: Identify appropriate data mining algorithms to solve real world problems

CO4: Compare and evaluate different data mining techniques like classification, prediction, clustering and association rule mining

CO5: Choose an appropriate method to perform exploratory analysis.

CO6: Interpret results by carrying out data visualization and formal inference procedures

BCA 353: DSE III (Principles of Operating Systems):

After successful completion of this course, students will be able to:

CO1: Describe algorithms for process, memory, and disk scheduling

CO2: Apply technique for inter-process communication and Multithreading.

CO3: Implement concept of critical-section

CO4: Compare and contrast deadlock avoidance and prevention.

CO5: Use functions for file system management
BCA354: Artificial Intelligence: After successful completion of this course, students will be able to: CO1: Apply the suitable algorithms to solve AI problems CO2: Identify and apply suitable Intelligent agents for various AI applications CO3: Build smart system using different informed search / uninformed search or heuristic approaches CO4: Represent complex problems with expressive language of representation
BCA355: SEC II (Cloud Computing): After successful completion of this course, students will be able to: CO1: Explain the core issues in cloud computing such as security, privacy, and interoperability. CO2: Choose the appropriate technologies, algorithms, and approaches for the given application. CO3: Compare and contrast various cloud services
BCA356: DSE I Laboratory (Programming in JAVA): After successful completion of this course, students will be able to: CO1: Identify classes, objects, class members and relationships for a given problem. CO2: Design end to end applications using object-oriented constructs. CO3: Apply collection classes for storing java objects. CO4: Use Java APIs for program development. CO5: Handle abnormal termination of a program using exception handling
BCA357: DSE II Laboratory (Data mining): After successful completion of this course, students will be able to: CO1: Implement data mining tasks using R CO2: Use the python packages to carry out data mining tasks. CO3: Perform data analysis and data visualization using python packages.

BCA 358: DSE III Laboratory (Operating Systems and AI) :

After successful completion of this course, students will be able to:

CO1: Implement algorithms for Process scheduling and Memory management

CO2: Describe process synchronization and multithreading

CO3: Compare and contrast the algorithms for memory management and its allocation policies.

CO4: Use searching algorithms

CO5: Design a simple Expert system

T. Y. BCA(Science) SEMESTER VI

BCA 361: Android Programming:

After successful completion of this course, students will be able to:

CO1: Describe the process of developing mobile applications.

CO2: Create mobile applications on the Android Platform.

CO3: Design and implement mobile applications involving data storage in SQLite database.

CO4: Use location-based services while developing applications

BCA 362: DSE-V Programming in Go:

After successful completion of this course, students will be able to:

CO1: Describe the core features and concepts in Go

CO2: Write simple Go programs using functions

CO3: Apply defining methods and Go Interfaces

CO4: Use Goroutines and Channels

CO5: Explore Go Packages

BCA 363: DSE VI Software Project Management:

After successful completion of this course, students will be able to:

CO1: Comprehend Software Project Management Concepts

CO2: Use various tools for Software Project Management Schedule various activities in software projects

CO3: Track a project and manage changes

CO4: Apply Agile Project Management concepts

CO5: Analyze staffing process for team building and decision making

BCA364: SEC III Management Information System:

After successful completion of this course, students will be able to:

CO1: Describe MIS, BPR, EMS

CO2: Compare MIS with BPR, DSS and EMS

CO3: Identify various ERP modules for a given application

CO4: List the applications of MIS in Manufacturing and service sectors

BCA365: SEC IV Internet of Things (IoT):

After successful completion of this course, students will be able to:

CO1: Define Embedded Systems and the Internet of Things

CO2: Apply enabling technologies for developing IoT systems

CO3: Design simple IoT applications Analyze protocols for communication among IoT devices

CO4: Describe cloud-based IoT systems Comprehend security issues in IoT applications

BCA366: DSE IV Laboratory (Android Programming):

After successful completion of this course, students will be able to:

CO1: Describe the process of developing mobile applications.

CO2: Create mobile applications on the Android Platform.

CO3: Design and implement mobile applications involving data storage in SQLite database

CO4: Use location-based services while developing applications

BCA367: DSE V Laboratory (Programming in GO and IoT):

After successful completion of this course, students will be able to:

CO1: Write programs using features supported in GO

CO2: Handle errors and utilize Goroutines and Channels

CO3: Write programs on File handling

CO4: Compare and contrast features of GO with another object oriented languages

CO5: Design Simple IoT application

BCA368: DSE VI Project Laboratory:

After successful completion of this course, students will be able to:

CO1: Demonstrate a sound technical knowledge of selected project topic.

CO2: Apply techniques for project management

CO3: Create various documents used during the development of the project

and a project report