



Department of Computer Applications

B.C.A.

Programme Specific Outcomes

On the successful completion of **Bachelor of Computer Applications** Programme, the students will,

PSO1:	Understand analyze and develop computer programs in the areas related to algorithms, web design and mobile application design.
PSO2:	Acquire the knowledge of the necessary technical, scientific as well as basic managerial and financial procedures to analyze and solve real world problems within their work domain.
PSO3:	Apply standard software engineering process and strategies in software project development using open source programming environment to deliver a quality product for business success.
PSO4:	Analyze and apply latest technologies to solve problems in the areas of computer applications.
PSO5:	Develop practical skills to provide solutions to industry, society and business.
PSO6:	Articulate the relevance of latest computing technologies in shaping the life.
PSO7:	Get acquainted with latest trends in technological development and thereby innovate new ideas and solutions to existing problems.
PSO8:	Demonstrate advanced skills in the effective analysis design and realization of system utilizing contemporary current technology.



VIRUDHUNAGAR HINDU NADARS' SENTHIKUMARA NADAR COLLEGE
(An Autonomous Institution Affiliated to Madurai Kamaraj University)
[Re-accredited with 'A' Grade by NAAC]
Virudhunagar – 626 001.

Course Outcomes – BCA

IBCA

Semester I

PROGRAMMING IN C

SUBJECT CODE: U2CAC1

LAB: PROGRAMMING IN C

SUBJECT CODE: U2CAC1P

In this course, the students will

CO1:	Understand the basics of programming languages.
CO2:	Understand the difference between various data types in programming languages.
CO3:	Be able to do string based Computation
CO4:	Develop programs to solve the variety of programs in Mathematics, Science, Business and Games.
CO5:	Be able to develop real world projects.
CO6:	Have deep knowledge in this language which helps the students in becoming an Embedded C and Internet of Things (IOT) Programmer

OFFICE AUTOMATION LAB

SUBJECT CODE: U2CAS1P

In this course, the students will

CO1:	Generate documentation, table and letter.
CO2:	Understand Newspaper editing and mail merge options.
CO3:	Know how to convert input data into spreadsheet.
CO4:	Perform calculations using both manually inputting formulas and Builtinfuctions.
CO5:	Generate simple and effective graphs to describe data.
CO6:	Use design layouts and templates for presentations.
CO7:	Create slide presentations that include text, graphics, animation, and transitions.
CO8:	Design a simple database
CO9:	Be able to query a database.
CO10:	Design a FORM and generate a REPORT.



Semester II

Object Oriented Programming with C++

SUBJECT CODE: U2CAC2

Object Oriented Programming with C++ Lab

SUBJECT CODE: U2CAC2P

In this course, the students will

CO1:	Learn syntax, features of and how to utilize the Standard Template Library.
CO2:	Perform object oriented programming to develop solutions to problems demonstrating usage of control structures, modularity, I/O. and other standard language constructs.
CO3:	Demonstrate adeptness of object oriented programming in developing solutions to problems demonstrating usage of data abstraction, encapsulation, and inheritance.
CO4:	Demonstrate ability to implement Runtime Polymorphism using Pointers and Virtual Functions.
CO5:	Learn other features of the C++ language including templates, exceptions, forms of casting, conversions, covering all features of the language.

DIGITAL PRINCIPLES AND COMPUTER ORGANIZATION

SUBJECT CODE: U2CAS2

In this course, the students will

CO1:	Be familiar with basic logic gates -- AND, OR & NOT, XOR, XNOR; independently or work in team to build simple logic circuits using basic.
CO2:	Understand Boolean algebra and basic properties of Boolean algebra; able to simplify simple Boolean functions by using the basic Boolean properties.
CO3:	Understand and examine the structure of various number systems.
CO4:	Understand, analyze and design various combinational and sequential circuits.
CO5:	Understand the relationship between instruction set architecture, system architecture, addressing modes, program sequencing, memory operations.
CO6:	Understand the usage of interrupts to implement I/O control and data transfers.
CO7:	Acquire knowledge of Semiconductor RAM and ROM memories, Cache memories and Virtual memories and their hierarchy.



II BCA

Semester III

JAVA PROGRAMMING THEORY

SUBJECT CODE: U2CAC31

JAVA PROGRAMMING LAB

SUBJECT CODE: U2CAC3P1

In this course, the students will

CO1:	Demonstrate the principles of object oriented programming concepts and solve simple problems using the fundamental syntax and semantics of the java programming language
CO2:	Understand the behavior of primitive data types, operators and decision & iteration control structures.
CO3:	Demonstrate the ability to use class and its types, constructor, overloading, overriding and arrays in a Java program.
CO4:	Understand the concept of package, interface, multithreading, and exception handling.
CO5:	Know file concept for input and/or output
CO6:	Acquire the knowledge about applet class and creating the applet animation programs.

DATA STRUCTURES – THEORY

SUBJECT CODE: U1CAC32

DATA STRUCTURES LAB

SUBJECT CODE: U3CAS3P

In this course, the students will

CO1:	Analyze algorithms and algorithm correctness.
CO2:	Write well-structured procedure-oriented programs.
CO3:	Know how to implement the Stack, Queue ADT using both array based and linked-list based data structures.
CO4:	Analyze run-time execution of sorting methods, including selection, merge sort, heap sort and Quick sort.
CO5:	Know how to implement binary search trees and graphs.
CO6:	Be able to design and analyze the time and space efficiency of the data structure.
CO7:	Have practical knowledge on the applications of data structures
CO8:	Identify the appropriate data structure for a given problem.



COMPUTER GRAPHICS

SUBJECT CODE: U2CAC33

In this course, the students will

CO1:	Get the concepts of Graphics display devices, different types of graphics drawing algorithms.
CO2:	Understand the theory of transformations such as scaling, rotation, translation, reflection, shearing etc.
CO3:	Demonstrate ability to implement clipping operations on simple 2-dimensional and 3-dimensional objects.
CO4:	Able to understanding of the theory of projection and Viewing.
CO5:	Understand animation techniques

Semester IV

OPERATING SYSTEMS

SUBJECT CODE: U2CAC41

In this course, the students will

CO1:	Understand the functions, structures and history of Operating Systems.
CO2:	Understand design issues associated with Operating Systems.
CO3:	Understand the concept of process and scheduling algorithms.
CO4:	Understand the concept of deadlock and different ways to handle it.
CO5:	Understand the concept of various memory management techniques.
CO6:	Understand the issues related to file system interface and Implementation, Disk Management.

DATA COMMUNICATION AND NETWORKS

SUBJECT CODE: U2CAC42

In this course, the students will

CO1:	Acquire knowledge about the basic communication / networking terms and OSI model.
CO2:	Understand the use of transmission media, working of interfaces and different error detection and correction techniques.
CO3:	Acquire knowledge about the networking devices and network protocols.
CO4:	Understand the working principle of various switching techniques.
CO5:	Acquire knowledge of networking and internetworking devices, routing algorithms and overall understanding of the WWW.



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CO6:	Acquire knowledge about the emerging network technologies.
CO7:	Have a deep knowledge in this subject which helps them in becoming a Network Administrator.

ADVANCED JAVA PROGRAMMING

SUBJECT CODE: U2CAC43

ADVANCED JAVA PROGRAMMING LAB

**SUBJECT CODE:U3CAC4P1 /
U2CAC4P2**

In this course, the students will

CO1:	Develop simple graphical user interface for java programs using GUI components
CO2:	Develop client/server applications and TCP/IP and UDP socket programming.
CO3:	Develop swing based graphical user interfaces.
CO4:	Analyze how Servlets fit into the java based web application and develop server side programs.
CO5:	Acquire knowledge about the manipulation of database using SQL with JDBC.
CO6:	Develop distributed applications using RMI
CO7:	Create dynamic web applications using JSP

VISUAL BASIC PROGRAMMING LAB

SUBJECT CODE: U3CAS4P

In this course, the students will

CO1:	Understand the fundamentals of visual programming and Graphical User Interface.
CO2:	Understand the properties and usage of various controls.
CO3:	Acquire knowledge about developing windows applications.
CO4:	Create DLL files.
CO5:	Perform Client/Server programming.
CO6:	Develop real world projects.
CO7:	Work in advanced visual programming languages.



III BCA

Semester V

RELATIONAL DATABASE MANAGEMENT SYSTEMS

SUBJECT CODE: U2CAC51

RELATIONAL DATABASE MANAGEMENT SYSTEMS LAB

SUBJECT CODE: U2CAC5P1

In this course, the students will

CO1:	Understand the basic concepts and the applications of database systems.
CO2:	Define a problem at the view level and ability to understand the physical structure of the database to handle data.
CO3:	Utilize the knowledge of basics of SQL and construct queries using SQL.
CO4:	Normalize the database and understand the internal data structure.
CO5:	Apply Relational Database theory and be able to write Relational Algebra expressions for queries.
CO6:	Use design principles for logical design of database using E-R method.
CO7:	Understand the transaction systems and Concurrency Control.
CO8:	Design and implement a database schema for a given problem domain.
CO9:	Prepare forms and reports.
CO10:	Perform Application development using SQL as a Back end tools.

WEB TECHNOLOGY - THEORY

SUBJECT CODE: U2CAE51

WEB TECHNOLOGY LAB

SUBJECT CODE: U2CAC5P2

In this course, the students will

CO1:	Describe and use the features and syntax of Programming language PHP.
CO2:	Retrieve, insert, update and delete data from the relational database MySQL.
CO3:	Create PHP resource pages and include them into another page.
CO4:	Design and implement dynamic websites with good aesthetic sense of designing and latest technical know-how's.
CO5:	Have a Good grounding of Web Application Terminologies and other web services.
CO6:	Gain confidence to create dynamic website on real world problems.
CO7:	Use fundamental skills to maintain web server services required to host a website.



CLOUD COMPUTING

SUBJECT CODE: U2CAE56

In this course, the students will

CO1:	Know the client server architecture used in cloud
CO2:	Acquire knowledge about the services of cloud computing
CO3:	Gain knowledge about the service providers of the cloud
CO4:	Know how to protect our data in cloud
CO5:	Know the usage off cloud in mobile cloud computing
CO6:	Become data analysts and data scientists with statistical knowledge

Semester VI

SOFTWARE ENGINEERING

SUBJECT CODE: U2CAC61

In this course, the students will

CO1:	Acquire strong fundamental knowledge in science, mathematics, fundamentals of computer science, software engineering and multidisciplinary engineering.
CO2:	Select and implement different software development process models and bring out innovative and novel solutions for software development
CO3:	Extract and analyze software requirements specifications for different projects and prepare documentations
CO4:	Define the basic concepts and understand the importance of Software project management concepts like cost estimation, scheduling and reviewing the progress.
CO5:	Develop some basic level of software architecture/design and apply standard coding practices
CO6:	Apply standard coding practices for the implementation of the software metrics
CO7:	Apply different testing and debugging techniques and analyzing their effectiveness.
CO8:	Demonstrate verification and validation techniques, QA that provide robust software and its maintenance.



DOT NET PROGRAMMING

SUBJECT CODE: U2CAC62

DOT NET PROGRAMMING LAB

SUBJECT CODE: U2CAC6P1

In this course, the students will

CO1:	Know the architecture of dot net using CLR
CO2:	Implement C# knowledge in dot net framework
CO3:	Acquire the knowledge of ASP in dot net framework
CO4:	Design the webpage in ASP.NET
CO5:	Know the visual basic.net and design the form design for front end applications
CO6:	Connect the database with dataset of embedded database in dot net framework
CO7:	Understand the differences between the usage of C#, VB, J# with dot net
CO8:	Have Deep knowledge of dot net frame work and become as embedded programming, web developer

CRYPTOGRAPHY

SUBJECT CODE: U2CAC63

In this course, the students will

CO1:	Understand, appreciate, employ, design and implement appropriate security technologies and policies to protect computers and digital information.
CO2:	Know Classical encryption techniques, Block ciphers and the Data Encryption Standard, Advanced Encryption Standard, Key management, Public key cryptosystems, Message authentication, Hash functions and algorithms, Digital signatures, E-Mail, Firewalls.
CO3:	Encrypt and decrypt messages using block ciphers, sign and verify messages using well known signature generation and verification algorithms.
CO4:	Identify computer and network security threats, classify the threats and develop a security model to prevent, detect and recover from the attacks.
CO5:	Develop SSL or Firewall based solutions against security threats, employ access control techniques to the existing computer platforms such as Unix and Windows NT.
CO6:	Acquire a high-level understanding of how information security functions in an organization.
CO7:	Be familiar with network security designs using available secure solutions (such as PGP, SSL, SET, etc)



MULTIMEDIA LAB

SUBJECT CODE: U2CAC6P2

In this course, the students will

CO1:	Design the photos using Editing Tools.
CO2:	Design and Implement an animation for various themes.
CO3:	Make various color corrections using adjustment layers for images.
CO4:	Implement Guide Motion tween and Shape tween.
CO5:	Prepare Multimedia Advertisement using Photoshop and Flash.

MOBILE APPLICATION DEVELOPMENT

SUBJECT CODE: U2CAS61

In this course, the students will

CO1:	Get an introduction of Android, became familiar with Android SDK tools.
CO2:	Begin to develop an application framework that serves as primary teaching tool such as Splash screen followed by Main menu, settings, help and scores screen.
CO3:	Know how to collect input from the user, how to display dialogs for getting input from the user and also implement the core application logic of the game.
CO4:	Gain knowledge of more specialized features such as how to work with graphics and how to leverage Location Based Services to sample game application.
CO5:	Analyze different ways to test the mobile applications and find out the ways to prepare for publishing Android application to Android Market.



M.C.A

Programme Specific Outcomes

On successful completion of Master of Computer Applications programme, the students will

PSO1:	Acquire knowledge of basic mathematics, accounting, computing fundamentals, programming concepts and other core computer subjects.
PSO2:	Map real life scenarios to various theoretical optimal solutions.
PSO3:	Use modern computing tools and techniques with confidence.
PSO4:	Work professionally with positive attitude as an individual or in multidisciplinary teams and communicate effectively.
PSO5:	Analyze customer requirements, create high level design, implement and document robust and reliable software systems.
PSO6:	Identify, critically analyzes, formulate and develop computer applications.
PSO7:	Know the importance of goal setting and to recognize the need for life-long learning.

Course Outcomes – MCA

IIMCA

Semester III

OPEN SOURCE TECHNOLOGY

SUBJECT CODE: P1LCC12

OPEN SOURCE PROGRAMMING LAB

SUBJECT CODE: P1LCC1P2

In this course, the students will

CO1:	Get knowledge of the basics of PHP such as Syntax, Logical and Control Statements.
CO2:	Understand the Importance of PHP Dynamic Web Development.
CO3:	Understand the MySQL for Store user data in Web Development.
CO4:	Connect with PHP and MySQL for Interactive Web Applications.
CO5:	Develop a Dynamic Web Applications using PHP with MySQL.



JAVA PROGRAMMING THEORY

SUBJECT CODE: P1LCC13

JAVA PROGRAMMING LAB

SUBJECT CODE: P1LCC1P1

In this course, the students will

CO1:	Demonstrate the principles of object oriented programming concepts and solve simple problems using the fundamental syntax and semantics of the java programming language
CO2:	Understand the behavior of primitive data types, operators and decision & iteration control structures.
CO3:	Demonstrate the ability to use class and its types, constructor, overloading, overriding and arrays in a Java program.
CO4:	Understand the concept of package, interface, multithreading, and exception handling.
CO5:	Know file concept for input and/or output
CO6:	Acquire the knowledge about applet class and creating the applet animation programs.
CO7:	Develop simple graphical user interface for java programs using GUI components.

OBJECT ORIENTED ANALYSIS AND DESIGN

SUBJECT CODE: P1LCE11

In this course, the students will

CO1:	Understand the importance of modeling concept for objects oriented development in system.
CO2:	Differentiate advance object-oriented approach from the traditional approach for design and development of System.
CO3:	Apply Unified Modeling Language (UML) for representation of an object-oriented system using different modeling views.
CO4:	Construct various UML models For Various development stages of System using the appropriate UML notation.
CO5:	Analyze and apply design issues to rectify the performance and good system design that is recognized by various object relationships.
CO6:	Identify, formulate and solve software development problems, software requirements, specification, software design, and implementation.



Semester IV

DATABASE MANAGEMENT SYSTEMS

SUBJECT CODE: P1LCC21

In this course, the students will

CO1:	Master the basic concepts and understand the applications of database systems
CO2:	Design and create a good database and use various SQL operations
CO3:	Construct an Entity-Relationship (E-R) model from specifications and to transform to relational model.
CO4:	Construct unary/binary/set/aggregate queries in Relational Algebra.
CO5:	Know how to remove data redundancy by translating created relational model into normalized designs.
CO6:	Understand database systems theory and apply that knowledge to implement triggers, B+ trees for indexing and hashing in SQL.
CO7:	Handle effectively the transactions management, concurrency control and recovery system in the database

DATA COMMUNICATION NETWORK

SUBJECT CODE: P1LCC22

In this course, the students will

CO1:	Know the fundamental concepts of data communications such as signal handling, types, propagation and their transmission in greater detail.
CO2:	Know serial and parallel modes of data transmission, key concepts of multiplexing and gained thorough knowledge of algorithms in transmission errors.
CO3:	Classify the types of data transmission media, focusing various network topologies and routing algorithms. Also elucidates the theory behind OSI protocol stack.
CO4:	Acquire the knowledge of the digital telephony protocol of ISDN along with the basics of Medium Access Control Sub layer and know how X.25 protocol works in WAN network.
CO5:	Get an introduction of the idea of Internetworking and working of these devices, deals with how Internet and IP functions and various areas related to IP.



MOBILE COMPUTING

SUBJECT CODE: P1LCE23

In this course, the students will

CO1:	Understand the concept of Wireless LANs, PAN, Mobile Networks, and Standard bodies in mobile computing.
CO2:	Describe the Architecture of GSM, GPRS, SMS and its applications.
CO3:	Know the constraints to develop applications for Handheld Devices.
CO4:	Understand the Windows CE & IMS Architecture.
CO5:	Identify and Handle the Challenges in Multimedia Delivery over the Internet and Network Security.

CLIENT-SERVER LAB

SUBJECT CODE: P1LCC2P1

In this course, the students will

CO1:	Create and manipulate Table.
CO2:	Understand the querying features such as finding duplicate or unmatched records, creating update, append or delete queries.
CO3:	Create visual basic modules and linking tables.
CO4:	Have the knowledge of advanced form design features such as use of the toolbox, command buttons, option groups, combo-boxes, lines or rectangles.

ADVANCED JAVA PROGRAMMING LAB

SUBJECT CODE: P1LCC2P2

In this course, the students will

CO1:	Develop distributed applications using Remote Method Invocation.
CO2:	Write a server side java application called Servlet and JSP to catch for data sent from client, process it and store it on database.
CO3:	Create and use custom JSP tags
CO4:	Develop client/server applications, UDP and TCP/IP socket programming.
CO5:	Update and retrieve the data from the databases using SQL
CO6:	Develop server side programs in the form of Servlets.
CO7:	Access a Remote method using Java Native Interface.



III MCA

Semester V

CRYPTOGRAPHY AND NETWORK SECURITY SUBJECT CODE: P1LCC31

In this course, the students will

CO1:	Understand the fundamentals of Cryptography.
CO2:	Acquire the Knowledge of standard algorithms
CO3:	Understand the various key distribution and management schemes.
CO4:	Know how to deploy encryption techniques to secure data in transit across data networks.
CO5:	Design security applications in the field of information technology.
CO6:	
CO7:	

PRINCIPLES OF COMPILER DESIGN

SUBJECT CODE: P1LCC32

In this course, the students will

CO1:	Know about the basic structure of compiler which covers Lexical Analysis, and Finite State Machines which used in text editors.
CO2:	Be introduced to the basic concepts and terminology in programming languages and study the pattern recognition.
CO3:	Get the knowledge in Parsing and classify the various kinds of Parsers such as Operator Precedence, recursive Descent, and LR Parsing.
CO4:	Get thorough ideas of intermediate-code generation and know about syntax-directed approach and several translation schemes for programming language.
CO5:	Review various types of data structures of symbol table and also know the essential error recovery techniques and code optimization.
CO6:	Apply the techniques of code optimization and produce structured programs from unstructured ones and become program verifiers.



CLOUD COMPUTING

SUBJECT CODE: P1LCC33

In this course, the students will

CO1:	Learn the knowledge of SPI architecture
CO2:	Acquire knowledge about the services of cloud computing
CO3:	Gain knowledge about the service providers of the cloud
CO4:	Create instances and manipulate it with data centre in cloud computing
CO5:	Know the security of data in cloud
CO6:	Have deep knowledge about cloud computing and become cloud administrators, and data centre administrators

ANDROID APPLICATION DEVELOPMENT

SUBJECT CODE: P1LCE33

In this course, the students will

CO1:	Understand the Architecture, Devices and Applications of Android.
CO2:	Understand the Android Activity Life Cycle and User Interface.
CO3:	Develop Interactive android Applications using Concepts such as Intents and Fragments.
CO4:	Develop android applications to manage user data using Databases, File Storage and Preferences.
CO5:	Export an Application to Android Play store and reach globally.

DOT NET PROGRAMMING LAB

SUBJECT CODE: P1LCC3P2

In this course, the students will

CO1:	Work with console and windows applications in VB.NET
CO2:	Gain the knowledge about how to connect database connection with VB.NET
CO3:	Work with C# in console and windows applications in C#.Net framework
CO4:	Design webpage in ASP in DOTNET framework
CO5:	Implement the validation control in Webpage forms



P.G.D.C.A

Programme Specific Outcomes

On the successful completion of **Post Graduate Diploma in Computer Applications**, the students will

PSO1:	Be equipped with skills required for designing and learn the latest trends in various subjects of computers and current technology.
PSO2:	Exhibit effective work ethics and be able to adapt to the challenges of a dynamic job environment.

Course Outcomes – PGDCA

Semester I

FUNDAMENTALS OF COMPUTER & INFORMATION TECHNOLOGY

SUBJECT CODE: G2CA11

In this course, the students will

CO1:	Get thorough knowledge in introduction to computers such as evolution, types and applications and also know the organization of computer.
CO2:	Be familiar with the basic concepts in Memory Hierarchy, different kinds of memory of the computer, storage devices and input devices and also know about the presentation of output.
CO3:	Get the knowledge in binary coding schemes and the representation of converting numbers and know the description of application software and system software.
CO4:	Gain knowledge related to internet and computer networking.
CO5:	Review various services provided by Internet and provide the basic ideas in Multimedia and its applications.

PROGRAMMING IN C

SUBJECT CODE: G2CA12

LAB: PROGRAMMING IN C

SUBJECT CODE: G2CA1P1

In this course, the students will

CO1:	Understand the basic terminology used in computer programming
CO2:	Write, compile and debug programs in C language.



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CO3:	Use different data types in a computer program.
CO4:	Design programs involving decision structures, and loops
CO5:	Understand the concept of arrays
CO6:	Know the built in string functions.
CO7:	Demonstrate different types of user defined functions.
CO8:	Explain the difference between call by value and call by reference

VISUAL BASIC PROGRAMMING LAB

SUBJECT CODE: G2CA1P2

In this course, the students will

CO1:	Understand the fundamentals of visual programming and Graphical User Interface.
CO2:	Understand the properties and usage of various controls.
CO3:	Acquire knowledge about developing windows applications.
CO4:	Get an idea about client server applications.

OFFICE AUTOMATION LAB

SUBJECT CODE: G2CA1P3

In this course, the students will

CO1:	Generate documentation, table and letter.
CO2:	Understand Newspaper editing and mail merge options.
CO3:	Know how to convert input data into spreadsheet.
CO4:	Perform calculations using both manually inputting formulas and Built in functions. To generate simple and effective graphs to describe data.
CO5:	Use design layouts and templates for presentations.
CO6:	Create slide presentations that include text, graphics, animation, and transitions.
CO7:	Design a simple database

Semester II

WEB PROGRAMMING THEORY

SUBJECT CODE: G2CA21

WEB PROGRAMMING LAB

SUBJECT CODE: G2CA2P1

In this course, the students will

CO1:	Employ fundamental computer theory to basic programming technique.
CO2:	Apply a structured approach to identifying needs, interest and functionality of a



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	website.
CO3:	Write well structured, easily maintained, standards-compliant, and accessible HTML code.
CO4:	Use JavaScript code to add dynamic content to pages.
CO5:	Use JavaScript to access and use web services for dynamic content.

RELATIONAL DATABASE MANAGEMENT SYSTEM SUBJECT CODE: G2CA22

In this course, the students will

CO1:	Getting through knowledge in introduction to databases and its overcome with that of File processing. Also know about Models, Architecture of Databases.
CO2:	Identify the basic E-R Model and its usage in detailed study and also know the Database design such as normal forms.
CO3:	Get the knowledge of SQL and describe various commands related to SQL.
CO4:	Work on the basic commands and able to perform computations.
CO5:	Review basic ideas in PL/SQL and its programming feature.

RDBMS LAB

SUBJECT CODE: G2CA2P2

In this course, the students will

CO1:	Construct SQL queries to perform CRUD(Create, Retrieve, Update, Delete) operations on database.
CO2:	Understand and apply Aggregate, String and Date functions in SQL.
CO3:	Understand and learn SQL and PL/SQL.

MULTIMEDIA LAB

SUBJECT CODE: G2CA2P3

In this course, the students will

CO1:	Design the photos using Editing Tools.
CO2:	Design and Implement an animation for various themes.
CO3:	Make various color corrections using adjustment layers for images.
CO4:	Implement Guide Motion tween and Shape tween.
CO5:	Prepare Multimedia Advertisement using Photoshop and Flash.