K.M.G COLLEGE OF ARTS AND SCIENCE, GUDIYATTAM
Department of Computer Applications
2017-2018

Programme Outcomes

Upon graduation, students will be able to:

S.NO	OUTCOMES
PO1	Developing the student for roles pertaining to computer applications and IT industry
PO2	Developing the student's skills to work as software programmer, system and network administrator, web designer
PO3	Develop various real time applications using latest technologies and programming languages.
PO4	An ability to handle the skills like computer graphics, web development, trouble shooting, and both in hardware & software.
PO5	Develop practical skills to provide solutions to industry, society and business
PO6	Develop the software projects by understanding the client requirement

SEMESTER - I

Subject Name: English **No. of Hour per week: 6**

Subject Code: BLE10 **Credit: 4**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
I (Regulation 2017-2018)	English I	4	CO1 – Students can help the learners recognize and operate in various styles and registers in English. CO2-Students are heighten their awareness of correct usage of English grammar in writing and speaking. CO2 - Students can modify their speaking ability in English both in terms of fluency and comprehensibility. CO3 - Students can enable their oral presentations and receive feedback on their performance. CO4 - Students can able to increase their reading speed and comprehension of academic articles. CO5 - Students can improve their reading fluency skills through extensive reading.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	S	S	M
CO2	S	M	M	S	S	S
CO3	S	S	M	M	S	S
CO4	S	M	M	M	M	M
CO5	S	S	M	M	S	S

PO – Programme outcome, CO – Course outcome
S - Strong, M - Medium, L – Low (may be avoided)

Subject Name: Digital Logic & Programming in C **No. of Hour per week: 6**

Subject Code: BCA11 **Credit: 6**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
I (Regulation 2017-2018)	Digital Logic & Programming in C	6	CO1 –Students can Apply the principles of number system, binary codes and Boolean algebra to minimize logic expressions. CO2 – Students can Develop K-maps to minimize and optimize logic functions up to 5 variables. CO3 – Students can identify the concepts of Constants, Variables, and Data Types, Operators and Expressions. Students can able to explain the concepts of Arrays, Character Arrays and Strings, User Defined Functions. CO4 – Students can understand the concepts of Structure and Unions, Pointers. Students to analyze the concepts of Managing Input and Output Operations, Decision Making and Branching, Decision Making and Looping CO5 – Students can evaluate the concepts of File Management in C. CO6 – Students can explain the concepts of Fundamental Algorithms, Factoring Methods.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	S	S	M
CO2	S	M	M	S	S	S
CO3	S	S	M	M	S	S
CO4	S	M	M	M	M	M
CO5	S	S	M	M	S	S
CO6	S	S	S	S	M	S

Subject Name: Mathematical Foundations I **No. of Hour per week: 7**

Subject Code: BAMA15B **Credit: 4**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
I (Regulation 2017-2018)	Mathematical Foundations – I	4	CO1 –Students can ability to apply mathematical logic to solve problems. CO2 – Students can realize the sets, relations, functions. CO3-Students can explain the discrete structures. CO4 –Students can use logical notation to define and reason about fundamental mathematical concepts such as sets, relations, and functions. CO5- Students can to solve complex problems by critical understanding, analysis and synthesis.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	M	S	S
CO2	S	S	M	M	S	S
CO3	S	M	M	S	S	S
CO4	S	S	M	S	S	M
CO5	S	S	S	S	M	M

Subject Name: Programming in C Lab **No. of Hour per week: 3**

Subject Code: BPCA13 **Credit: 2**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
I (Regulation 2017-2018)	Programming in C Lab	2	CO1-Students can develop own individual programs. CO2-Students ability to work with textual information, Characters and Strings. CO3-Students to develop logic which will help to create programs, application in c. CO4-Students are control the sequence of the programs and give logical Outputs.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	M	S	S	S
CO2	S	S	M	S	S	S
CO3	S	M	M	S	S	M
CO4	S	M	M	S	M	M

Subject Name: Environmental Studies **No. of Hour per week: 2**

Subject Code: BES10 **Credit: 2**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
I (Regulation 2017-2018)	Environmental studies	2	CO1 – Students can able analyze Eco system in their environment. CO2 –Students can Recognize the importance of natural resources. CO3 – Students can adopting sustainability as practice in life, society and industry. CO4 – Students can use scientific reasoning to understand environment problems.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	S	M	M	S
CO2	S	S	S	S	S	M
CO3	S	S	S	S	M	S
CO4	M	S	S	S	S	S

SEMESTER-II

Subject Name: English II **No. of Hour per week: 4**

Subject Code: BLE20 **Credit: 4**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
II (Regulation 2017-2018)	English II	4	CO1 – Students can help the learners recognize and operate in various styles and registers in English. CO2-Students are heighten their awareness of correct usage of English grammar in writing and speaking. CO3 - Students can modify their speaking ability in English both in terms of fluency and comprehensibility. CO4 - Students can enable their oral presentations and receive feedback on their performance. CO5 - Students can able to increase their reading speed and comprehension of academic articles. CO6 - Students can improve their reading fluency skills through extensive reading.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	M	S	S
CO2	M	S	S	S	S	S
CO3	S	S	S	S	S	S
CO4	S	S	S	S	S	S
CO5	S	S	S	S	S	S
CO6	M	S	M	S	S	S

PO – Programme outcome, CO – Course outcome
S - Strong, M - Medium, L – Low (may be avoided)

Subject Name: C++ & Data Structures **No. of Hour per week: 6**

Subject Code: BCA21 **Credit: 6**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
II (Regulation 2017-2018)	C++ & Data Structures	6	CO1 – The students can able to develop the concepts of object oriented programming and constructor and destructor. CO2 – The students can able to illustrate the concepts of inheritance and apply it for real time problems. CO3 – The students can to analyze the concepts of Stacks and Queue using array and pointers. CO4 – The students can to describe, implement and recognize data structures including stacks, queues, linked lists, Binary trees traversal and graphs. CO5 – The students can obtain the knowledge of Recursion, Binary Search. CO6 – The students can able to understand the concepts of Sorting and Searching Algorithms.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	S	S	S	M
CO2	S	M	M	S	S	M
CO3	S	M	S	S	M	S
CO4	S	S	M	S	M	S
CO5	S	S	S	M	S	S
CO6	S	M	S	M	S	M

Subject Name: C++ & Data Structures Lab **No. of Hour per week: 3**

Subject Code: BPCA23 **Credit: 2**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
II (Regulation 2017-2018)	C++ and Data Structures Lab	2	CO1 – The student's ability to Creating and Deleting the Objects with the concepts of Constructors and Destructors. CO2 – The students can able to implement the Polymorphism concepts and Operator Overloading. CO3 – The students can ability to implement basic Data Structures such as Arrays, Linked Lists, Stacks, Queues, Doubly Linked List and Infix to Postfix Conversion. CO4 – The students can able to apply Algorithm for solving problems like Sorting and Searching.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	M	S	M	M
CO2	S	M	M	M	S	S
CO3	S	M	M	M	M	S
CO4	S	M	M	S	M	S

Subject Name: Mathematical Foundations II **No. of Hour per week: 7**

Subject Code: BAMA25B **Credit: 6**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
II (Regulation 2017-2018)	Mathematical Foundations – II	6	CO1 – Apply the concept of matrices to solve the system of linear equations CO2 – Using matrices to Hamilton theorem in real life CO3 – Identify definite interaction simple problem and rational funtion as anti-derivative. CO4 – To defined definite integrals CO5 – Using analytical geometry of three dimention. CO6 – To discuss the planes and straight lines Using mathematics formulas to write the programs.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	S	S	M
CO2	S	M	M	M	M	S
CO3	S	S	S	M	M	S
CO4	S	M	M	M	S	S
CO5	S	S	M	M	M	S
CO6	S	S	S	M	M	S

Subject Name: Value Education **No. of Hour per week: 2**

Subject Code: BGA20 **Credit: 2**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
II (Regulation 2017-2018)	Value Education	2	CO1-Students can understand the importance of value based living CO2-Students to gain deeper understanding about the purpose of their life. CO3-Students can understand and start applying the essential steps to become good leaders CO4-Students emerge as responsible citizens with clear conviction to practice values and ethics in life.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	M	S	S
CO2	S	M	M	M	S	S
CO3	M	M	M	L	S	S
CO4	S	S	S	S	S	M

Subject Name: Soft Skill **No. of Hour per week: 2**

Subject Code: BSS20 **Credit: 1**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
II (Regulation 2017-2018)	Soft skill	1	CO1 – The students can able to gain confidence in their speaking skills. CO2- The students will be to understand English language thoroughly.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	S	S	S
CO2	S	S	S	S	S	S

SEMESTER – III

Subject Name: Programming in Java **No. of Hour per week: 2**

Subject Code: BCA31 **Credit: 4**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
III (Regulation 2017-2018)	Programming in Java	3	CO1 – Students can analyze the basic concepts object oriented language. CO2 – Students can able to illustrate writing programs skills in using multithreading. CO3 – Students can identify the user interface design techniques. CO4 – Students can construct reusable programs using the concepts of inheritance, polymorphism, interfaces and packages. CO5 – Students can apply the concepts Exception handling to develop efficient and error free codes. CO6 – Students can create event driven GUI and web related applications which reflect the real word scenarios.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	M	S	S
CO2	S	S	M	S	M	S
CO3	S	M	S	M	M	S
CO4	S	M	M	M	S	S
CO5	S	S	M	S	S	S
CO6	S	M	S	M	S	M

Subject Name: E-Commerce **No. of Hour per week: 4**

Subject Code: BCA32 **Credit: 4**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
III (Regulation 2017-2018)	E-Commerce	4	CO1 – Students can analyze the compare and contrast traditional commerce and electronic E-commerce. CO2 – Students can explain the major types of E-commerce. CO3 –Students can discuss the process of E-commerce framework. CO4 – Students can identify the security threats in the E-commerce environment. CO5 –Students can describe how procurement and supply chains relate to B2B. CO6-Students can be aware of the ethical, social and security issues of information systems.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	M	S	S
CO2	S	M	S	S	M	S
CO3	S	S	S	S	S	S
CO4	S	S	M	S	S	S
CO5	M	S	S	S	M	S
CO6	S	M	M	S	S	S

Subject Name: Resource Management Techniques **No. of Hour per week: 5**

Subject Code: BCA33 **Credit: 4**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
III (Regulation 2017-2018)	Resource management Techniques	4	CO1-Students can Make use of simplex method to solve optimization problems. CO2- Students can able toDemonstrate the concept of duality to solve Shortest route problem C03- Students can learn integer programming method C04-Stuednts implements the types of constraints and optimization methods in real life. CO5- Students can Utilize PERT and CPM in project management. CO6- Students can be aware of Networking ,project ,project planning, project scheduling and controlling .

Course Mapping

Cos	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	M	S	S
CO2	S	M	S	S	M	S
CO3	S	S	S	S	S	S
CO4	S	S	M	S	S	M
CO5	M	S	S	S	M	S
CO6	S	S	M	S	M	S

Subject Name: Programming in Java Lab **No. of Hour per week: 3**

Subject Code: BPCA36 **Credit: 3**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
III (Regulation 2017-2018)	Java Programming Lab	3	CO1 - Students can able to apply basic concepts such as function Overloading, array and string manipulation in Java CO2 – students can able to utilize classes in the real time applications CO3-students can able to understand the types of inheritance CO4 –They can implement packages, manipulate threads and exception handling techniques CO5 – They can Develop Applet programs and manipulate the IO streams

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	M	M	M
CO2	S	M	M	M	M	M
CO3	S	M	S	M	M	S
CO4	S	M	S	M	M	M
CO5	S	M	M	M	M	M

Subject Name: Financial Accounting I **No. of Hour per week: 7**

Subject Code: BACM15C **Credit: 4**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
III (Regulation 2017-2018)	Financial Accounting I	4	CO1 –Students can acquire the knowledge in accounting, system of maintenance of accounts, journals, ledger, bill of exchange, and account current, average due date and bank reconciliation statement. CO2 – Students can describe the role of accounting information and its limitations. CO3 – Students can identify and analyze the reasons for the different between cash book and pass book balances. CO4 – Students can be determining the useful life and value of the depreciable asset. CO5 –Students can able to Develop analytical skills in single entry system of accounts. Department trading and profit and loss account and balance sheets, stocks and debtors system and final accounts system and hire purchase trading account.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	S	S	M	S
CO2	M	M	M	M	M	M
CO3	S	M	M	M	M	M
CO4	M	S	S	M	M	M
CO5	S	S	M	M	M	M

Subject Name: Design and Analysis of Algorithm **No. of Hour per week: 3**

Subject Code: BSCA34 **Credit: 3**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
III (Regulation 2017-2018)	Design and Analysis of Algorithm	3	CO1- students can aware the basic of Algorithm ,performance analysis and randomized algorithm. CO2- Students can utilize Divide and conquer methods in our life. CO3- Students can operate the Greedy methods Knapsack problem, Tree Vertex Splitting , for maximum incomes in Features. CO4-Students can find out the shortest paths using Dynamic programming. CO5- Students can search the benefits using Binary Trees,Graphs,8 Queens problem.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	M	S	M
CO2	S	M	M	S	S	M
CO3	S	M	M	S	S	M
CO4	S	M	M	S	M	M
CO5	S	M	M	S	M	M

Subject Name: Introduction To Information Technology No. of Hour per week: 2

Subject Code: BNCA35 Credit: 2

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
III (Regulation 2017-2018)	Introduction to Information Technology	2	CO1 – students can aware the basic of computer and its evolation. CO2 – They can utilize office automation software Ms-Office C03 – Students can operate windows OS and its Features. CO4 – students can aware the basic idea of internet and management systems

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	S	S	M
CO2	S	S	S	M	S	S
CO3	S	S	S	S	M	S
CO4	S	S	S	S	S	S

SEMESTER-IV

Subject Name: DBMS **No. of Hour per week: 5**

Subject Code: BCA41 **Credit: 3**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
IV (Regulation 2017-2018)	Relational Database Management Systems	3	CO1 - The students can able to understand DBMS architecture, physical and logical database designs, database modeling, relational, hierarchical and network models. CO2 - The students can able to apply Structured query language (SQL) for database definition and database manipulation. CO3 - The students can able to demonstrate of normalization theory and apply such knowledge to the normalization of a database. CO4 - The students can able to create database for real time application by their own. CO5- The students can able to understand the concept of File Organization. CO6 - The students can able to apply aggregate in their applications.

Course Mapping

Cos	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	M	S	S
CO2	S	S	S	S	M	S
CO3	S	S	S	S	S	S
CO4	S	S	M	S	S	S
CO5	M	S	S	S	S	S
CO6	S	S	S	S	S	S

Subject Name: Enterprise Resource Planning **No. of Hour per week: 5**

Subject Code: BCA42 **Credit: 3**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
IV (Regulation 2017-2018)	Enterprise Resource Planning	4	CO1 – The students able to make basic use of Enterprise software, and its role in integrating business functions. CO2 – The students able to analyze the strategic options for ERP identification and adoption. CO3 – The students able to design the ERP implementation strategies. CO4 – The students can able to create reengineered business processes for successful ERP implementation. CO5- The students can able to improve ERP related technologies. CO6- The students can able to analyze success and failure of ERP factors.

Course Mapping

Cos	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	M	S	S
CO2	S	S	S	S	M	S
CO3	S	S	S	S	S	S
CO4	S	S	M	S	S	S
CO5	M	S	S	S	S	S
CO6	S	S	S	M	S	S

Subject Name: Decision Support System **No. of Hour per week: 5**

Subject Code: BCA43 **Credit: 4**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
IV (Regulation 2017-2018)	Decision Support System	4	CO1- students can able to making Business Decision. CO2- Students can Gaining Competitive Advantage with DSS CO3- Students can able to Analyzing Business Decision Processes in future. CO4- Students can Designing and Developing DSS CO5- Students can apply Designing and Evaluating DSS User Interfaces CO6- Students can Building Web-Based and Inter-Organizational DSS

Course Mapping

Cos	PO1	PO2	PO3	PO4	PO5	PO6
CO1	M	S	S	M	S	S
CO2	S	M	S	S	M	S
CO3	S	S	S	S	S	M
CO4	S	S	M	S	S	S
CO5	M	S	S	S	S	S
CO6	S	S	S	M	S	S

Subject Name: Computer Organisation and Architecture **No. of Hour per week: 5**

Subject Code: BSCA44 **Credit: 4**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
IV (Regulation 2017-2018)	Computer Organisation and Architecture	3	CO1 - Describe the fundamental organisation of a computer system. CO2 - Explain the functional units of a processor CO3 - Explain addressing modes, instruction formats and program control statements CO4 - Distinguish the organization of various parts of a system memory hierarchy CO5 - Understand the various micro-operations and the internal operation of a processor.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	S	M	M
CO2	S	M	M	S	M	S
CO3	S	S	S	S	M	S
CO4	S	S	M	S	S	M
CO5	S	S	S	S	S	M

Subject Name: RDBMS Lab **No. of Hour per week: 3**

Subject Code: BPCA46 **Credit: 3**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
IV (Regulation 2017-2018)	RDBMS Lab	3	CO1 – The students can able to implement Basic DDL, DML and DCL commands CO2 – The students can able to understand Data selection and operators used in queries and restrict data retrieval and control the display order CO3 – The students can able to implement sub queries and understand their purpose. CO4 – The students can able to implement Join multiple tables using different types of joins. CO5 – The students can able to develop PL/SQL Block for procedures, Functions, cursors and exception handling etc.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	M	S	M	M
CO2	S	S	M	S	M	S
CO3	S	M	M	M	M	S
CO4	S	M	S	M	S	S
CO5	S	M	M	M	M	S

Subject Name: Financial Accounting II **No. of Hour per week: 4**

Subject Code: BACM25C **Credit: 6**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
IV (Regulation 2017-2018)	Financial Accounting II	6	CO1 – The students can able to acquire the knowledge in accounting, system of maintenance of accounts, journals, ledger, bill of exchange, account current, average due date and bank reconciliation statement. CO2 – The students can able to know the features of single entry system, difference between single entry and double entry system, need for departmental accounts, basis for allocation of expenses, difference between wholesale profit and retail profit, different methods of depreciation, features of hire purchase and installments systems and difference between hire purchase and installment system. CO3 – The students can able to familiarizing the methods of preparation of single entry system of accounts, inter-department transfer at cost or selling price. Preparation of branch accounts, preparation of accounts using various methods of depreciation and calculation of interest under hire purchase and installment system of accounting. CO4 – The students can able to develop analytical skills in single entry system of accounts. Department trading and profit and loss account and balance sheets, stocks and debtors system and final accounts system and hire purchase trading account. CO5 –The students can able to evaluate the cost of department purchase consolidated final accounts and default and repossession of goods under hire purchase system. CO6 – To enrich the students gain practical exposure in operating a branch independently with the knowledge of branch and departmental accounts.

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	M	S	M	M
CO2	S	S	S	M	M	M
CO3	S	M	M	S	S	S
CO4	S	S	S	M	M	M
CO5	S	M	M	S	M	S
CO4	S	M	S	M	S	M

Subject Name: Internet and its Applications **No. of Hour per week: 2**

Subject Code: BNCA45 **Credit: 2**

Course Outcomes

Semester	Course Name	Course Credit	Course Outcomes
IV (Regulation 2017-2018)	Internet and its applications	2	CO1 - Understand the fundamental concepts of Internet CO2 - Understand the services of Internet CO3 - Design the colorful web pages using HTML tags CO4 - Understand the functions of search engines, Email Concept. CO5 - Develop the networking skills and use the internet based applications

Course Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	S	S	S
CO2	S	S	M	M	M	S
CO3	S	M	M	S	S	M
CO4	S	S	M	S	S	S
CO5	S	S	M	M	M	S

SEMESTER – V

Subject Name: MOBILE APPLICATION DEVELOPMENT No. of Hour per week: 6

Subject Code: BCA51 Credit: 3

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
V (Regulation 2017-2018)	Mobile Application Development	3	CO1-Students are identify various concept of mobile programming for other platform. CO2- Students can utilize rapid prototyping techniques to developed sophisticated mobile interface. CO3-Students can able to demonstrate their understanding of the fundamentals of Android Operating Systems. CO4-Students can ability to deploy software to mobile devices. CO5-Students can be ability to debug programs running on mobile devices.

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	M	M	M
CO2	S	S	S	M	M	M
CO3	S	M	M	S	M	S
CO4	M	S	M	M	S	S
CO5	S	M	M	M	S	M

Subject Name: OPERATING SYSTEM **No. of Hour per week: 6**

Subject Code: BCA52 **Credit: 3**

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
V (Regulation 2017-2018)	Operating System	3	CO1-Students will able to control access to a computer and the files that may shared. CO2-Students can demonstrate the knowledge are the components of computer and their respective roles in computing. CO3-Students can ability to recognize and resolve user problem with standard operating environment. CO4-Students their gain practical knowledge of how programming languages, Operating Systems, Architectures interact and how to use each effectively. CO5-Students they will be learn different memory management techniques like paging segmentation and demand paging etc.,

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	M	M	S	S
CO2	S	M	M	M	S	M
CO3	S	M	M	S	M	S
CO4	S	M	M	S	M	S
CO5	S	S	M	M	M	M

Subject Name:DATA COMMUNICATION & NETWORK No. of Hour per week: 4
Subject Code: BCA53 Credit: 2
Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
V (Regulation 2017-2018)	Operating System	3	CO1-Students will able to control access to a computer and the files that may shared. CO2-Students can demonstrate the knowledge are the components of computer and their respective roles in computing. CO3-Students can ability to recognize and resolve user problem with standard operating environment. CO4-Students their gain practical knowledge of how programming languages, Operating Systems, Architectures interact and how to use each effectively. CO5-Students they will be learn different memory management techniques like paging segmentation and demand paging etc.,

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	S	S	S	S
CO2	M	S	M	S	S	S
CO3	S	M	M	S	M	M
CO1	SM	S	S	M	S	S
CO2	S	S	S	S	S	S

Subject Name: Mobile Applications Development Lab **No. of Hour per week: 4**

Subject Code: BPCA56 **Credit: 3**

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
V (Regulation 2017-2018)	Mobile Applications Development - Lab	3	CO1-Students can apply essential Android Programming concepts. CO2- Students can able to develop various Android applications related to layouts & rich uses interactive interfaces. Co3- Students they develop Android applications related to mobile related server-less database like SQLITE. CO4-Students can able to demonstrate their understanding of the fundamentals of Android Operating Systems. CO5-Students can ability to deploy software to mobile devices.

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	S	M	M	S
CO2	M	S	L	S	L	M
CO3	M	S	S	M	L	M
CO4	M	S	S	M	L	L
CO5	M	S	S	L	S	S

Subject Name: OPERATING SYSTEM LAB **No. of Hour per week: 4**

Subject Code: BPCA57 **Credit: 3**

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
V (Regulation 2017-2018)	Operating System - Lab	3	CO1 – The students can know how data is transmitted and checking of errors. CO2 – Students can develop program for FIFO, LRU Optimal page replacement algorithms. CO3 – The Students can demonstrate the various operation of file system. CO4-Students can apply the scheduling algorithms for the given problem.

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	M	M	M	M
CO2	S	S	M	S	M	S
CO3	S	S	M	M	M	M
CO4	S	S	M	M	M	S

Subject Name: DATA MINING **No. of Hour per week: 3**

Subject Code: BECA54A **Credit: 3**

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
V (Regulation 2017-2018)	Data Mining	3	CO1 – provide the foundation knowledge in multi dimensional data model. CO2 – classify types of meta data. CO3 - Remove redundancy and incomplete data from the dataset using data preprocessing methods. CO4 – Students can explain the concept of cluster analysis. CO5 – To Develop a data mining application for data analysis of the techniques.

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	S	M	M
CO2	S	M	M	S	M	S
CO3	S	M	S	S	S	M
CO4	S	S	S	S	M	M
CO5	S	M	M	S	M	M

Subject Name: SOFTWARE ENGINEERING **No. of Hour per week: 3**

Subject Code: BSCS55 **Credit: 3**

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
V (Regulation 2017-2018)	Software Engineering	3	CO1- Students can able to decompose the given project in various phases of a lifecycle. CO2- Students can able to choose appropriate process model depending on the user requirements. CO3- Students can able perform various life cycle activities like Analysis, Design, Implementation, Testing and Maintenance. CO4- Students can able to know various processes used in all the phases of the product. CO5- Students can apply the knowledge, techniques, and skills in the development of a software product.

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	S	M	M
CO2	S	S	S	M	M	S
CO3	S	M	M	S	M	M
CO4	S	S	M	M	S	S
CO5	S	M	M	S	M	M

SEMESTER – VI

Subject Name: Cloud Computing **No. of Hour per week: 7**

Subject Code: BCA61 **Credit: 5**

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
VI (Regulation 2017-2018)	Cloud Computing	5	CO1 - The students can able to know the main concepts, key technologies, strengths, and limitations of cloud computing and the possible applications for state-of-the-art cloud computing CO2 - The students can able to identify the architecture and infrastructure of cloud computing, including SaaS, PaaS, IaaS, public cloud, private cloud, hybrid cloud, etc. CO3 - The students can able to explain the core issues of cloud computing such as security, privacy, and Interoperability. CO4 - The students can able to choose the appropriate technologies, algorithms, and approaches for the related issues. CO5 - The students can able to identify problems, and explain, analyze, and evaluate various cloud computing solutions.

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	M	S	M
CO2	S	S	M	S	S	M
CO3	S	M	M	S	S	M
CO4	S	S	M	S	M	M
CO5	S	M	M	S	M	M

Subject Name: Open Source Programming **No. of Hour per week: 6**

Subject Code: BCA62 **Credit: 4**

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
VI (Regulation 2017-2018)	Open Source Programming	4	CO1 - The students can able to describe Introduction to Open Source Software, advantages, needs and examples of open source software, Hyper Text Markup Language, Lists, Tables, and Frames. CO2 - The students can able to describe Cascade Style Sheet, style sheet basics, style sheet properties. CO3 - The students can able to describe basis for open source operating system CO4 - The students can able to describe the JavaScript syntax, data types, variables, arrays, functions, control statements, objects. CO5 - The students can able to create simple database using DDL, DML commands. CO6 – The students can able to write PHP programs.

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	M	M	M
CO2	S	M	M	M	M	M
CO3	S	M	S	S	S	S
CO4	S	M	M	S	M	S
CO5	S	S	S	S	M	M
CO6	S	M	S	S	S	S

Subject Name: ASP .NET LAB **No. of Hour per week: 4**

Subject Code: BPCA66 **Credit: 3**

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
VI (Regulation 2017-2018)	ASP .NET Lab	3	CO1 – The students can able to create user interactive web pages using ASP.Net. CO2 - The students can able to create a form with Basic controls. In c#. NET. CO3 - The students can able to create simple data binding applications using ADO.Net connectivity. CO4 –The students can able to perform validation using validation controls. CO5 - The students can able to performing Database operations for Windows Form and web applications.

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	M	M	M
CO2	S	S	M	M	S	M
CO3	S	M	M	M	S	M
CO4	S	S	S	M	S	S
CO5	S	M	S	S	S	S

Subject Name: OPEN SOURCE PROGRAMMING LAB **No. of Hour per week: 4**
Subject Code: BPCA67 **Credit: 3**

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
VI (Regulation 2017-2018)	Open Source Programming - Lab	3	CO1.The students can able to know features of OSS over Commercial s/w CO2. The students can able to develop simple shell programs using simple commands CO3.The students can able to apply the DDL and DML commands for their simple Applications with MySQL as backend. CO4. The students can able to classify the usage of different operators and functions in PHP. CO5. The students can implement the web pages for manipulating files

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	M	S	S
CO2	S	M	M	M	S	S
CO3	S	M	M	S	S	S
CO4	S	S	S	S	S	M
CO5	S	S	S	S	S	S

Subject Name: Mobile Computing **No. of Hour per week: 3**

Subject Code: BECA63B **Credit: 3**

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
VI (Regulation 2017-2018)	Mobile Computing	3	CO1 - The students can able to know the main concepts of wireless communication and the solutions that is in use. CO2 - The students can able to about various types of Multiple Access Control and its functionality. CO3 - The students can able to ability to analyze to improved data services in cellular communication. CO4 - The students can able to design and implement mobile applications. CO5 – The students can able to analyze next generation mobile communication system.

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	M	S	S	M
CO2	S	M	S	M	S	S
CO3	M	M	M	M	S	S
CO4	S	S	S	S	S	M
CO5	M	S	M	S	S	M

Subject Name: Multimedia Systems **No. of Hour per week: 3**

Subject Code: BECA64C **Credit: 3**

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
VI (Regulation 2017-2018)	Multimedia Systems	3	CO1 - The students can able to analyze various protocols for multimedia system.. CO2 - The students can able to develop web animation to access multimedia system. CO3 - The students can able to design a portable multimedia system. CO4 - The students can analyze and apply in real time situation. CO5 – The students can able to design animation.

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	M	S	S	M
CO2	S	S	S	S	S	S
CO3	M	M	M	M	S	S
CO4	S	S	S	S	S	M
CO5	M	S	S	S	S	M

Subject Name: ASP .NET **No. of Hour per week: 3**

Subject Code: BSCA65 **Credit: 3**

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
VI (Regulation 2017-2018)	ASP .NET	3	CO1 –The students can know the Microsoft .NET Framework and ASP.NET page structure. CO2 – The students can able to design web application with variety of controls. CO3 –The students can able to access the data using inbuilt data access tools CO4 - The students can able to use Microsoft ADO.NET to access data in web Application CO5 – The students can able to configure and deploy Web Application, Develop secured web application.

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	M	M	M
CO2	S	M	M	M	M	M
CO3	S	M	S	S	S	S
CO4	S	M	M	S	M	S
CO5	S	S	S	S	M	M