GEMS ARTS AND SCIENCE COLLEGE, RAMAPURAM

DEPARTMENT OF BACHELOR OF COMPUTER APPLICATION

PROGRAMME OUTCOMES (POs), PROGRAMME SPECIFIC OUTCOMES (PSOs), and COURSE OUTCOMES (COs)

PROGRAMME: BCA

PROGRAMME OUTCOMES (POS)

PO1 The basic objective of the programme is to open a channel of admission for computing courses for students, who have done the 10+2 and are interested in taking computing/IT as a career.

PO2 After acquiring the Bachelor's Degree (BCA) at University of Calicut, there is further educational opportunity to go for an MCA or other Master's Programme like MSc (Computer Science), MSc(IT), MBA, etc., at this university or at any other University/Institute.

PO3 After completing the BCA programme, a student should be able to get entry level job in the field of Information Technology or ITES or they can take up self-employment in Indian & global software market.

PROGRAMME SPECIFIC OUTCOMES (PSOS)

PSO1 To attract young minds to the potentially rich and employable field of computer applications.

PSO2 To be a foundation graduate programme this will act as a feeder course for higher studies in the area of Computer Science/Applications.

PSO3 To develop skills in software development so as to enable the BCA graduates to take up self-employment in Indian and global software market.

PSO4 To train and equip the students to meet the requirements of the Software industry in the country and outside.

COURSE OUTCOMES (COs)
SEMESTER I

COURSE CODE	PAPER NAME	CREDITS	COURSE OUTCOME
BCA1B01	Computer Fundamentals & HTML	3	**CO1**- To equip the students with fundamentals of Computer
			CO2- To learn the basics of Computer organization
			CO3- To equip the students to write algorithm and draw flow chart for solving simple problems
			CO4- To learn the basics of Internet and webpage design

SEMESTER II

COURSE CODE	PAPER NAME	CREDITS	COURSE OUTCOME
BCA2B02	Problem Solving using C	3	**CO1**- To equip the students with fundamental principles of Problem Solving aspects.
			CO2- To learn the concept of programming
			CO3- To study C language
			CO4- To equip the students to write programs for solving simple computing problems
BCA2B03	Programming Laboratory I: HTML and Programming in C	4	**CO1-** To make the students learn web designing
			CO2- To make the students learn programming environments
			CO3- To practice procedural programming concepts.

			CO4- To make the students equipped to solve mathematical or scientific problem using C.

SEMESTER III

COURSE CODE	PAPER NAME	CREDITS	COURSE OUTCOME
A11	Python Programming	4	**CO1**-Understand various statements, datatypes and functions in Python.
			CO2- Develop programs in Python programming language
			CO3- Understand the basics of Object Oriented Programming using Python
BCA3B04	Data Structures using C	3	**CO1-** To understand the concept of data structures
			CO2- To make the students aware of various data structures
			CO3-To equip the students to implement fundamental data structures
BCA3C06	Theory of Computation	3	**CO1-** To get general introduction of theory of computer science
			CO2- To get a general understanding of different languages-grammar and automata

SEMESTER IV

COURSE CODE	PAPER NAME	CREDITS	COURSE OUTCOME
A 13	Data Communication and Optical Fibers	4	
A 14	Microprocessors- Architecture and Programming	4	**CO1**-To understand internals of Microprocessor.
			CO2-To learn architecture of 8085 Microprocessor
			CO3-To learn instruction set of 8085 Microprocessor

COURSE CODE	PAPER NAME	CREDITS	COURSE OUTCOME
			CO4-To learn how to program a Microprocessor
BCA4B05	Database Management System and RDBMS	3	**CO1**- To learn the basic principles of database and database design
			CO2- To learn the basics of RDBMS
			CO3- To learn the concepts of database manipulation SQL
			CO4- To study PL/SQL language
BCA4B06-	Programming Laboratory II:Data Structures and RDBMS	4	**CO1**- To make the students equipped to solve mathematical or scientific problems using C
			CO2- To learn how to implement various data structures.
			CO3- To provide opportunity to students to use data structures to solve real life problem
BCA4C07	E-Commerce	3	**CO1**- To get a general introduction of the Electronic Commerce framework.
			O2–To get a general understanding on the various electronic payment system.
			O3–To get a general understanding on the Internal information systems.
			CO4-To get a general understanding on the new age information
BCA4C08	Computer Graphics	3	**CO1-**To learn the basics of Computer Graphics

SEMESTER V

COURSE CODE	PAPER NAME	CREDITS	COURSE OUTCOME
BCA5B07	Computer Organization and Architecture	3	**CO1**- To learn logic gates, combinational circuits and sequential circuits
			CO2- To learn basics of computer organization and architecture
BCA5B08	Java Programming		**CO1-** To review on concept of OOP.

		3	**C02-** To learn Java Programming Environments.
			C03- To practice programming in Java.
			CO4- To learn GUI Application development in JAVA.
BCA5B09	Web Programming using PHP	3	**CO1-** To review on concept of OOP.
			CO2- To learn PHP Programming Environments.
			CO3- To practice programming in PHP.
			CO4- To learn GUI Application development in PHP
BCA5B10	Principles of Software Engineering	3	**CO1-** To learn engineering practices in Software development.
			CO2- To learn various software development methodologies and practices.
			CO3- To learn and study various Evaluation methods in Software Development
BCA5D01	**Open Course**- Introduction to Computers and Office Automation	3	**CO1**- To learn Office Automation.

SEMESTER VI

COURSE CODE	PAPER NAME	CRE DITS	COURSE OUTCOME
BCA6B11	Android Programming	3	**CO1**- To have a review on concept of Android programming.
			CO2- To learn Android Programming Environments
			CO3- To practice programming in Android
			CO4 -To learn GUI Application development in

			Android platform with XML
BCA6B12	Operating Systems	3	**CO1**- To learn objectives & functions of Operating Systems.
			CO2- To understand processes and its life cycle
			CO3- To learn and understand various Memory and Scheduling Algorithms.
			CO4- To have an overall idea about the latest developments in Operating Systems
BCA6B13	Computer Networks	3	**CO1**- To learn about transmissions in Computer Networks.
			CO2- To learn various Protocols used in Communication.
			CO3- To have a general idea on Network Administration
BCA6B14	Programming Laboratory III: Java and PHP Programming	4	**CO1**- To practice Java programming.
			CO2- To practice client side and server side scripting.
			CO3- To practice PHP Programming.
			CO4- To practice developing dynamic websites.
			CO5- To practice how to interact with databases through PHP
BCA6B15	Programming Laboratory IV: Android and Linux Shell Programming		**CO1**- To practice Android programming.
			CO2- To practice user interface applications.
			CO4- To develop mobile application.
			CO5- To practice shell programming.

BCA6B16A	ELECTIVE -System Software	3	**CO1**- To build fundamental knowledge in system software.
			CO2-To learn functions of various system software.
			CO3-To learn specifically learn compilation process of a program
BCA6B17	Industrial Visit and Project Work	2	**CO1**- To provide practical knowledge on software development process