B.Sc. COMPUTER SCIENCE

PROGRAMME OUTCOME

The basic outcome 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. After acquiring the Bachelor's Degree (B.Sc. Computer Science) 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. Also after completing the B.Sc. Computer Science Programme, a student should be able to get entry level job in the field of Information Technology or ITES or they can take up selfemployment in Indian & global software market.

PROGRAMME SPECIFIC OUTCOME

The specific outcome of the programme includes:

- To attract young minds to the potentially rich & employable field of computer applications.
- To be a foundation graduate Programme this will act as a feeder course for higher studies in the area of Computer Science/Applications.
- To develop skills in software development so as to enable the B.Sc. Computer Science graduates to take up self-employment in Indian & global software market.
- To train & equip the students to meet the requirements of the Software industry in the country and outside.

COURSE OUTCOMES

SEMESTER - I

BCS1B01 – COMPUTER FUNDAMENTALS AND HTML

- To equip the students with fundamentals of Computer
- To learn the basics of Computer organization
- To equip the students to write algorithm and draw flow chart for solving simple problems
- To learn the basics of Internet and webpage design

SEMESTER - II

BCS2B02 – PROBLEM SOLVING USING C

- To equip the students with fundamental principles of Problem Solving aspects.
- To learn the concept of programming
- To study C language
- To equip the students to write programs for solving simple computing problems

BCS2B03 - PROGRAMMING LABORATORY I: LAB EXAM OF 1st AND 2nd SEMESTER HTML AND PROGRAMMING IN C

- To equip the students with fundamental principles of Problem Solving aspects.
- To learn the concept of programming
- To study C language
- To equip the students to write programs for solving simple computing problems

SEMESTER - III

BCS3B04 – DATA STRUCTURES USING C

- To introduce the concept of data structures
- To make the students aware of various data structures
- To equip the students implement fundamental data structures

SEMESTER - IV

BCS4B05 – DATABASE MANAGEMENT SYSTEM AND RDBMS

- To learn the basic principles of database and database design
- To learn the basics of RDBMS
- To learn the concepts of database manipulation SQL
- To study PL/SQL language

BCS4B06- PROGRAMMING LABORATORY II: LAB EXAM OF 3rd AND 4th SEMESTER DATA STRUCTURES AND RDBMS

To make the students equipped to solve mathematical or scientific problems using C

- To learn how to implement various data structures.
- To provide opportunity to students to use data structures to solve real life problems.

SEMESTER - V

BCS5B07-COMPUTER ORGANIZATION AND ARCHITECTURE

- To learn logic gates, combinational circuits and sequential circuits
- To learn basics of computer organization and architecture

BCS5B08-JAVA PROGRAMMING

- To review on concept of OOP.
- To learn Java Programming Environments.
- To practice programming in Java.
- To learn GUI Application development in JAVA.

BCS5B09-WEB PROGRAMMING USING PHP

- To learn web Programming Environments.
- To practice web programming in PHP.

BCS5B10-PRINCIPLES OF SOFTWARE ENGINEERING

- To learn engineering practices in Software development.
- To learn various software development methodologies and practices.
- To learn and study various Evaluation methods in Software Development.

BCS6B14- PROGRAMMING LABORATORY III: LAB EXAM OF Vth SEMESTER JAVA AND PHP PROGRAMMING

- To practice Java programming
- To practice client side and server side scripting.
- To practice PHP Programming.
- To practice developing dynamic websites.
- To practice how to interact with databases through PHP.

SEMESTER - VI

BCS6B11- ANDROID PROGRAMMING

- To have a review on concept of Android programming.
- To learn Android Programming Environments.
- To practice programming in Android.
- To learn GUI Application development in Android platform with XML

BCS6B12-OPERATING SYSTEMS

- To learn objectives & functions of Operating Systems.
- To understand processes and its life cycle.
- To learn and understand various Memory and Scheduling Algorithms.
- To have an overall idea about the latest developments in Operating Systems

BCS6B13-COMPUTER NETWORKS

- To learn about transmissions in Computer Networks.
- To learn various Protocols used in Communication.
- To have a general idea on Network Administration.

BCS6B15 - PROGRAMMING LABORATORY IV:
LAB EXAM OF ANDROID AND LINUX SHELL PROGRAMMING

- To practice Android programming
- To practice user interface applications
- To develop mobile application.
- To practice shell programming

BCS6B17-PROJECT WORK

- To provide practical knowledge on software development process.