



UNIVERSITY OF CALICUT

Abstract

B.Sc Programme in Computer Science – under CUCBCSS UG 2014 – Scheme and Syllabus approved - implemented w.e.f 2014 admission onwards- Orders issued.

G & A - IV - J

U.O.No. 6931/2014/Admn

Dated, Calicut University.P.O, 17.07.2014

- Read:-*1. U.O. No. 3797/2013/CU, dated 07.09.2013 (CBCSS UG Modified Regulations)
(File.ref.no. 13752/GA IV J SO/2013/CU).
2. U.O. No. 5180/2014/Admn, dated 29.05.2014 (CBCSS UG Revised Regulations)
(File.ref.no. 13752/GA IV J SO/2013/CU).
3. Item No: 1 of the minutes of BOS in Computer Science UG held on 28.1.14
4. Minutes of the meeting of Faculty of Science held on 3.2.14
5. Item II (i). of the minutes of Academic Council held on 20.3.14

ORDER

The Modified Regulations of Choice Based Credit Semester System for UG Curriculum w.e.f 2014 was implemented under the University of Calicut vide paper read as (1). The Revised CUCBCSS UG Regulations has been implemented w.e.f 2014 admission, for all UG programme under CUCBCSS in the University, vide paper read as (2).

As per The paper read as (3) the Scheme and Syllabus of B.Sc Programme in Computer Science under Choice based Credit Semester System (UG) was approved by the Board of Studies in Computer Science UG. As per paper read as(4) above, the Faculty of Science has approved this minutes and as per paper read as 5 above the AC has approved it.

Sanction has therefore been accorded for implementing the Scheme and Syllabus of B.Sc Programme in Computer Science with effect from 2014 admission onwards.

Orders are issued accordingly. Revised Syllabus appended.

Muhammed S
Deputy Registrar

To

1. All Affiliated Colleges/SDE/Dept.s/Institutions under University of Calicut.
2. The Controller of Examinations, University of Calicut.
3. The Director SDE, University of Calicut.

Forwarded / By Order

Section Officer

UNIVERSITY OF CALICUT
THENHIPALAM, CALICUT UNIVERSITY P.O



**DEGREE OF
BACHELOR OF SCIENCE (B.SC)**
IN
COMPUTER SCIENCE
(CHOICE BASED CREDIT AND SEMESTER SYSTEM)
UNDER THE
FACULTY OF SCIENCE

SYLLABUS
(FOR THE STUDENTS ADMITTED FROM THE ACADEMIC YEAR 2014 – 15 ONWARDS)

BOARD OF STUDIES IN COMPUTER SCIENCE (UG)
THENHIPALAM, CALICUT UNIVERSITY P.O
KERALA, 673 635, INDIA
JULY, 2014

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B.SC. COMPUTER SCIENCE PROGRAMME STRUCTURE

SEMESTER I

| Course No. | Course Code | Title | Hours | | Marks | | Credit |
|--------------|-------------|---|-----------|---|------------|------|-----------|
| | | | T | P | Int. | Ext. | |
| 01 | XXXXA01 | Communication Skills in English | 5 | 0 | 20 | 80 | 4 |
| 02 | XXXXA02 | Critical Reasoning, Writing and Presentation | 4 | 0 | 20 | 80 | 3 |
| 03 | XXXXA07 | Communication Skill in Languages other than English | 4 | 0 | 20 | 80 | 4 |
| 04 | BCS1B01 | Problem Solving Using C | 2 | 2 | 20 | 80 | 3 |
| 05 | XXXXC01 | Complementary Mathematics I | 4 | 0 | 20 | 80 | 3 |
| 06 | XXXXC01 | Optional Complementary I* | 4 | 0 | 20 | 80 | 3 |
| Total | | | 25 | | 600 | | 20 |

SEMESTER II

| Course No. | Course Code | Title | Hours | | Marks | | Credit |
|--------------|-------------|--|-----------|---|------------|------|-----------|
| | | | T | P | Int. | Ext. | |
| 07 | XXXXA03 | Reading Literature in English | 5 | 0 | 20 | 80 | 4 |
| 08 | XXXXA04 | Reading on Indian Constitution Secularism and Sustainable Environment | 4 | 0 | 20 | 80 | 3 |
| 09 | XXXXA08 | Literature in Languages other than English | 4 | 0 | 20 | 80 | 4 |
| 10 | BCS2B02 | OOP Concepts and Data Structures Using C++ | 2 | 0 | 20 | 80 | 3 |
| 11 | BCS2B03 | Programming Laboratory I: Programming in C & Data Structures Using C++ | 0 | 2 | 20 | 80 | 2 |
| 12 | XXXXC02 | Complementary Mathematics II | 4 | 0 | 20 | 80 | 3 |
| 13 | XXXXC02 | Optional Complementary II* | 4 | 0 | 20 | 80 | 3 |
| Total | | | 25 | | 700 | | 22 |

SEMESTER III

| Course No. | Course Code | Title | Hours | | Marks | | Credit |
|--------------|-------------|-------------------------------------|-----------|---|------------|------|-----------|
| | | | T | P | Int. | Ext. | |
| 14 | XXXXA11 | Numerical Skill | 4 | 0 | 20 | 80 | 4 |
| 15 | XXXXA12 | General Informatics | 4 | 0 | 20 | 80 | 4 |
| 16 | BCS3B04 | Fundamentals of Digital Electronics | 2 | 1 | 20 | 80 | 3 |
| 17 | BCS3B05 | Visual Programming Using VB.NET | 1 | 3 | 20 | 80 | 3 |
| 18 | XXXXC02 | Complementary Mathematics III | 5 | 0 | 20 | 80 | 3 |
| 19 | XXXXC02 | Optional Complementary III* | 5 | 0 | 20 | 80 | 3 |
| Total | | | 25 | | 600 | | 20 |

SEMESTER IV

| Course No. | Course Code | Title | Hours | | Marks | | Credit |
|--------------|-------------|--|-----------|---|------------|------|-----------|
| | | | T | P | Int. | Ext. | |
| 20 | XXXXA13 | Entrepreneurship | 4 | 0 | 20 | 80 | 4 |
| 21 | XXXXA14 | Basics of Audio & Video Media | 4 | 0 | 20 | 80 | 4 |
| 22 | BCS4B06 | Fundamentals of Database Management System and RDBMS | 3 | 2 | 20 | 80 | 3 |
| 23 | BCS4B07 | Programming Laboratory II: VB.NET & RDBMS | 0 | 2 | 20 | 80 | 2 |
| 24 | XXXXC03 | Complementary Mathematics IV | 5 | 0 | 20 | 80 | 3 |
| 25 | XXXXC03 | Optional Complementary IV* | 5 | 0 | 20 | 80 | 3 |
| Total | | | 25 | | 600 | | 19 |

SEMESTER V

| Course No. | Course Code | Title | Hours | | Marks | | Credit |
|--------------|-------------|--|-----------|---|------------|------|-----------|
| | | | T | P | Int. | Ext. | |
| 26 | BCS5B08 | Computer Organization and Architecture | 5 | 0 | 20 | 80 | 4 |
| 27 | BCS5B09 | Java Programming | 3 | 3 | 20 | 80 | 4 |
| 28 | BCS5B10 | Web Programming Using PHP | 3 | 3 | 20 | 80 | 4 |
| 29 | BCS5B11 | Principles of Software Engineering | 4 | 0 | 20 | 80 | 4 |
| 30 | XXX5DXX | Open Course | 2 | 0 | 10 | 40 | 2 |
| | | Project Work | 0 | 2 | | | |
| Total | | | 25 | | 450 | | 18 |

SEMESTER VI

| Course No. | Course Code | Title | Hours | | Marks | | Credit |
|--------------|-------------|--|-----------|---|------------|------|-----------|
| | | | T | P | Int. | Ext. | |
| 31 | BCS6B12 | Android Programming | 4 | 1 | 20 | 80 | 4 |
| 32 | BCS6B13 | Fundamentals of Operating Systems | 4 | 1 | 20 | 80 | 4 |
| 33 | BCS6B14 | Computer Networks | 5 | 0 | 20 | 80 | 4 |
| 34 | BCS6B15 | Programming Laboratory III: Java & PHP Programming | 0 | 2 | 20 | 80 | 2 |
| 35 | BCS6B16 | Programming Laboratory IV: Android & Linux shell Programming | 0 | 2 | 20 | 80 | 2 |
| 36 | BCS6B17X | Elective Course | 4 | 0 | 20 | 80 | 3 |
| 37 | BCS6B18 | Project Work | 0 | 2 | 10 | 40 | 2 |
| Total | | | 25 | | 650 | | 21 |


LIST OF OPEN COURSES

| Course No. | Course Code | Title |
|------------|-------------|---|
| 31 | BCS5D01 | Introduction to Computers & Office Automation |
| 31 | BCS5D02 | Web Designing |
| 31 | BCS5D03 | Introduction to Problem Solving and C Programming |

LIST OF ELECTIVE COURSES

| Course No. | Course Code | Title |
|------------|-------------|-------------------------------|
| 37 | BCS6B17a | Computer Graphics |
| 37 | BCS6B17b | System Software |
| 37 | BCS6B17c | Microprocessor & Applications |




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