

P.O. Valanchery, Malappuram Dist, Kerala, Pin: 676 552. Phone: 0494-2642670

www.meskvmcollege.org, Email: principal@meskvmcollege.org

Aided by Govt. of Kerala and Affiliated to University of Calicut Reaccredited with 'A' Grade by NAAC (Score 3.28) ISO 9001:2015 certified institution

Application th C++		me Programme Code  MESKV/41/CA	Course Code BCA1C01	Year of Introduction
	BCA	MESKV/41/CA	BCA1C01	2014
Discrete Mathematics Object Oriented Programming with C++	BCA	MESKV/41/CA		1,107
Object Oriented Programming with C++		1415-014/ 14/ 6/1	BCA1C02	2014
	BCA	MESKV/41/CA	BCA2B02	2014
Data Structures Using C++	ВСА	MESKV/41/CA	BCA3B04	2014
Visual programming using C-#.net	BCA	MESKV/41/CA	BCA4B05	2014
Programming Laboratory II RDBMS &C#.net	BCA	MESKV/41/CA	BCA4B07	2014
Android Programming	BCA	MESKV/41/CA	BCA5B08	2014
Java Programming	ВСА	MESKV/41/CA	BCA5B09	2014
Computer Organization and Architecture	BCA	MESKV/41/CA	BCA5B11	2014
Microprocessors and Applications	BCA	MESKV/41/CA	BCA5B12	2014
Web programming	BCA	MESKV/41/CA	BCA6B13	2014
Software Engineering	ВСА	MESKV/41/CA	BCA6B14	2014
Operating System	BCA	MESKV/41/CA	BCA6B15	2014
Programming Laboratory III Java and Web Programming	ВСА	MESKV/41/CA	BCA6B16	2014
Problem Solving Using C	BCA	MESKV/41/CA	BCA1B01	2014
Computer fundamentals and HTML	BCA	MESKV/41/CA	BCA1B01	2014
Problem Solving Using C	BCA	MESKV/41/CA	BCA2B02	2014
Programming laboratory practical I	BCA	MESKV/41/CA	BCA2B03	2017
Financial Management and Accounting	ВСА	MESKV/41/CA	BCA2C03	2017
Operation Research	BCA	MESKV/41/CA	BCA2C04	2017
Datastructure using C	. BCA	MESKV/41/CA	BCA3B04	2017
Computer Oriented Numerical & Statistical methods	BCA	MESKV/41/CA	BCA3C05	2017
Theory of Computation	BCA	MESKV/41/CA	BCA3C06	2017
Database management system and RDMS	BCA	MESKV/41/CA	BCA4B05	2017
Programming Laboratory II (Datastructure and RDMS)	BCA	MESKV/41/CA	BCA4B06	2017
Computer Graphics	BCA	MESKV/41/CA	BCA4C08	2017



VALANCHERY, PIN- 678 557



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Name of the New Courses Introduced in the Last 5 years	Programme Name   Programme Code	Programme Code	Course	Year of Introduction
Web programming using PHP	BCA	MESKV/41/CA	BCA5B09	2017
Principles of Software Engineering	BCA	MESKV/41/CA	BCA5B10	2017
Android Programming	BCA	MESKV/41/CA	BCA6B11	2017
Programming Laboratory IV	BCA	MESKV/41/CA	BCA6B15	2017
Computer Networks	BCA	MESKV/41/CA	BCA6B13	2017

(Abstract)

BCA programme under Choice based Credit Semester System - Scheme and Syllabus - implemented with effect from 2009 admission onwards - approved - Orders issued.

### GENERAL AND ACADEMIC BRANCH - I 'J' SECTION

No. GA I/J1/2471/06

Dated, Calicut University. P.O., 29.06.2009.

### Read: 1. U.O.No.GAI/J2/3601/08 Vol.II dated 19.06.2009.

- 2. Minutes of the meeting of the Board of Studies in Computer Science and Applications held on 02.05.2009.
- 3. Item No.2 (xxii) of the minutes of Faculty of Science held on 05.05.2009.
- 4. Item No.II-A-23 of the minutes of meeting of the Academic Council of 14.05.2009.

ORDER

Choice based Credit Semester System and Grading has been introduced for UG curriculum in all affiliated colleges under this University with effect from 2009 admission onwards and the Regulations for the same implemented vide paper cited 1st above.

As per paper read as (2) above, the Board of Studies has resolved to approve the scheme and

Syllabus of BCA Programme under Choice based Credit Semester System.

As per paper read as (3) & (4) above, the Faculty of Science at its meeting held on 05.05.2009 endorsed the minutes of Board of Studies and the Academic Council held on 14.05.2009 approved the same.

Sanction has therefore been accorded to implement the Scheme and Syllabus of BCA Programme under Choice based Credit Semester System in this University with effect from 2009 admission onwards.

Orders are issued accordingly. Scheme and Syllabus appended.

Sd/-**DEPUTY REGISTRAR (G&A I)** For REGISTRAR.

To

The Principals of all affiliated Colleges offering BCA Programme.

Copy to: C.E, EX Sn, EGI, DR, B.Sc

System Administrator (with a request to upload in University website), Tabulation Sn., Enquiry/G&A-I F.Sn./SF/DF/FC.

Forwarded/By Order

SECTION OFFICER

### **B.C.A Programme**

### Syllabi for Core/Open Courses

### Programme Structure

Total Courses: 39

Total Credits: 120

Se	Cou			Cor	ntact Ho	ours	
m es te r	No	Course Code	Course Title	Th eo ry	Lab	T ot al	Credit s
	1	CA1A01	Communication Skills in English	4	0	4	4
	2	CA1A02	Critical Reasoning, Writing And Presentation	4	0	4	4
1	3	CA1A03	Literature in Malayalam /Hindi/Other Indian/World Languages other than English	4	O	4	4
Se m es te	4	CA1801	Computer Fundamentals & Programming in C	3	0	3	2
	5	CA1B02	Programming Language in C LAB I	0	2	2	
	6	CA1C01	Mathematics - I	4	0	4	3
	7	CA1C02	Optional Complimentary I or	4	0	4	3
30			Optional Complimentary with Lab	2	2	4	3

			Total (7 Courses)			25	20
	8	CA2A04	Reading Literature In English	4	0	4	4
	9	CA2A05	Literature and Contemporary issues	4	0	4	4
	10	CAZA06	Communication Skills in Languages other than English	4	0	4	4
Se m es	11	CA2803	Programming in C <sup>++</sup> and Datastructure	3	2	5	2
te r	12	CA2C03	Mathematics II	4	0	4	3
	13	CA2C04	Optional Complimentary I or Optional Complimentary with Lab	4 2	0	4	3
			Total (6 Courses)			25	20
	14	CA3A07	History And Philosophy of science	4	0	4	4
Ht	15	CA3A08	Basics of Business Management	5	0	5	4
Se m es te	16	CA3804	Database Design and RDBMS	4	0	4	3
r	17	CA3B05	Operating Systems	4	0	4	3
	18	CA3C05	Financial management and Accounting	4	0	4	3

			Optional Complimentary II or	4	0	4	3
	19	CA3C06	Optional Complimentary with Lab	2	2	4	3
			Total (6 Courses)			25	20
	20	CA4A09	Basic Numerical Skills	4	0	4	4
	21	CA4A10	Entrepreneurship Development	4	0	4	4
	22	CA4806	Programming in Java	3	2	5	3
Se m es	23	CA4B07	Programming Laboratory — Data structures using C	0	4	4	3
te r	24	CA4C07	E-Commerce	4	0	4	3
	25	CA4C08	Management Information Systems	4	0	4	3
			Total (6 Courses)			25	20
v	26	CASB08	Data Communication & Mobile Computing	5	0	,5	4
Se m es te	27	CA5B09	Computer Networks	4	Ð	4	3
r	28	CA5B10	Software Engineering	4	0	4	4

29	CA5B11	Visual Programming using VB .NET	3	2	5	3
30	CA5D01	Choose one course from Open Course I	3	2	5	3
31	CA5B12	Mini Project Work	0	2	2	-
		Total (7 Courses)			25	17
32	CA6B13	WEB Programming using PHP	3	2	5	3
33	CA6B14	Computer Graphics and Multimedia	3	1	4	3
34	CA6815	Programming Laboratory II	0	4	4	3
35	CA6816	Programming Laboratory III	0	4	4	3
36	CA6D02	Choose one course from Open Course II	2	1	3	3
37	CA6B17	Project Work	0	5	5	8
		Total (7 Courses)			25	2

### Total 39Courses and 120 Credits

### Open Course - I

CA5D01A - Stimulation in Modeling

CA5D01B- Computer Animation

### Open Course - II

CA6D02A - Software Testing

CA6D02B- Linux Administration



### **Abstract**

Sachelor of Computer Application – under CUCBCSS UG 2014 – Scheme and Syllabus approved - replemented we.f 2014 admission onwards- Orders issued.

### G & A - IV - J

J.O.No. 6833/2014/Admn

Dated, Calicut University.P.O, 16.07.2014

Read:-1. U.O. No. 3797/2013/CU, dated 07.09.2013 (CBCSS UG Modified Regulations) (File.ref.no. 13752/GAIV J SO/2013/CU).

- 2. U.O. No. 5180/2014/Admn, dated 29.05.2014 (CBCSS UG Revised Regulations) (File.ref.no. 13752/GAIV 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 Bachelor of Computer

Application 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 Bachelor of Computer Application 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.

# CURRICULUM FOR B.C.A PROGRAMME (2014 - 15 ACADEMIC YEAR ONWARDS - AS PER THE CUCBESSUG 2013 REGULATIONS)

Total Courses: 37 Total Credits: 120

	No			N	lark	s		nta		
Semester	Course N	Course Code	Course Title	Intern	Extern	Total	Theory	Lab	Total	Credit
	1	XXXXA01	Common English Course I	20	80	100	4	0	4	4
	2	XXXXA02	Common English Course II	20	80	100	4	0	4	3
er	3	XXXXA03	Additional Language Course I	20	80	100	5	0	5	4
Semester	4	BCA1B01	Problem Solving using C	20	80	100	2	2	4	3
- Se	5	BCA1C01	Mathematical Foundation of Computer Applications	20	80	100	4	0	4	3
	6	BCA1C02	Discrete Mathematics	20	80	100	4	0	4	3
	Tot	tal (6 Cours	ses)			600			25	2
	7	XXXXA03	Common English Course III	20	80	100	4	0	4	4
	8	XXXXA04	Common English Course IV	20	80	100	4	0	4	60
spier	9	XXXXA09	Additional Language Course II	20	80	100	5	0	5	4
II Semester	10	₿CA2B02	Object Oriented Programming with C++	20	80	100	2	2	4	3
=	4	BCA2C03	Computer Oriented Statistical Methods	20	80	100	4	0	4	
	12	BCA2C04	Numerical Methods in C	20	80	100	4	0	4	1
	To	tal (6 Cours	(202			600		1	25	2

	0	2	0 80 2	7	Marl	re			act		1
Semester	Course No	Course Code	Course Title	Intern ,	Extern	Total	Theory =	Lab	Total a	Credit	
	13	XXXXA06	General Course I	20	80	100	4	0	4	4	
	14	BCA3A12 XXXXA12	General Course II	20	80	100	4	0	4	4	
ster	15	BCA3B03	Database Design & RDBMS	20	80	100	3	2	5	3	A De La Calaboration de
Semester	16	BCA3B04	Data Structures Using C++	20	80	100	2	2	4	3	1
	17	BCA3C05	Financial & Management Accounting	20	80	100	4	0	4	3	
	18	BCA3C06	Operations Research	20	80	100	4	0	4	3	-
	Tot	al (6 Cours	es)			600			25	20	-
	19	XXXXA 1	General Course III -EDP	20	80	100	4	0	4	4	1
	20	XXXXA143	General Course IV	20	80	100	4	0	4	4	
	21	BCA4B05	Visual Programming Using C#.Net	20	80	100	5	0	5	3	
Semester	22	BCA4B06	Programming Laboratory I - Data Structures Using C++	20	80	100	0	2	2	2	
IV Semi	23	BCA4B07	Programming Laboratory II - RDBMS & C#.Net	20	80	100	0	2	2	2	
	24	BCA4C07	E-Commerce	20	80	100	4	0	4	3	The same of the sa
	25	BCA4C08	Management Information Systems	20	80	100	4	0	4	3	

10	S	C		ı	Marl	ks	H	ou	rs	
Semester	Course	Course Code	Course Title	Intern	Extern	Total	Theory	Lab	Total	Credit
	26	BCA5B08	Android Programming	20	80	100	3	1	4	4
	27	BCA5B09	Java Programming	20	80	100	2	4	6	4
	28	BCA5B10	Computer Networks	20	80	100	3	1	4	4
V Semester	29	BCA5B11	Computer Organization and Architecture	20	80	100	5	0	5	4
< Sc.	30	BCA5B12	Microprocessor and Applications	20	80	100	3	1	4	3
	31	XXX5DXX	Open Course (Other Streams)	10	40	50	2	0	2	2
	Tot	al (6 Cours	es)			550			25	21
	32	BCA6B13	Web Programming	20	80	100	4	0	4	3
	33	BCA6B14	Software Engineering	20	80	100	4	0	4	3
_	34	BCA6B15	Operating Systems	20	80	100	5	0	5	4
Semester	35	BCA6B16	Programming Laboratory- III: Java & Web Programming	20	80	100	0	6	6	2
1/	36	BCA6B17	Project & Programme Viva Voce	10	40	50	0	2	2	2
	37	BCA6B18x	Elective	20	80	100	4	0	4	4
	Tot	al (6 Cours	es)			550			25	18

THENHIPALAM, CALICUT UNIVERSITY P.O.



# DEGREE OF BACHELOR OF COMPUTER APPLICATION (B. C. A)

(CHOICE BASED CREDIT AND SEMESTER SYSTEM)

UNDER THE

**FACULTY OF SCIENCE** 

## **SYLLABUS**

FOR THE STUDENTS ADMITTED FROM THE ACADEMIC YEAR 2017 – 18 ONWARDS

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

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# Bachelor of Computer Application (B.C.A) <u>Programme Structure</u>

		I Seme	ster						
				Marks		Cont	act Ho	ours	*
Course No	Course Code	Course Title	Internal	External	Total	Theory	Lab	Total	Credit
1	XXXXA01	Common English Course I	20	80	100	5	0	5	4
2	XXXXA02	Common English Course II	20	80	100	4	0	4	3
3	XXXXA07	Additional Language Course I	20	80	100	4	0	4	4
4	BCA1B01	Computer Fundamentals & HTML	20	80	100	2	2	4	3
5	BCA1C01	Mathematical Foundation of Computer Applications	20	80	100	4	0	4	3
6	BCA1C02	Discrete Mathematics	20	80	100	4	0	4	3
To	tal 6 Courses				600	23	2	25	20
		II Sem	este	r					
	*			Mark	cs	Cor	tact H	lours	
Course No	Course Code	Course Title	Internal	External	Total	Theory	Lab	Total	Cred
7	XXXXA03	Common English Course III	20	80	100	5	0	5	4
8	XXXXA04	Common English Course IV	20	80	100	4	0	4	3
9	XXXXA08	Additional Language	20	80	100	4	Ó	4	4

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		Course II							
0	BCA2B02	Problem Solving using C	20	80	100	2	2	4	3
11	BCA2B03	Programming Laboratory I: Lab Exam of 1 <sup>st</sup> & 2 <sup>nd</sup> Sem. HTML & Programming in C	20	80	100	0	0	0	.2
12	BCA2C03	Financial & Management Accounting	20	80	100	4	0	4	3
13	BCA2C04	Operations Research	20	80	100	4	0	4	3
-	al 7 Courses				700	23	2	25	22
0				Mark	S		tact H	ours	Cred
Course No	Course Code	Course Title	Internal	External	Total	Theory	Lab Lab	Total	Credi
Coul			Int	Ext	-	Ę		F	
14	XXXXA11	General Course I-Basic Numerical Skills	20	80	100	4	0	4	4
15	XXXXA12	General Course II- General Informatics	20	80	100	4	0	4	4
16	BCA3B04	Data Structures Using C	20	80	100	3	4	7	4
U	BCA3C05	Computer Oriented Numerical & Statistical Methods	20	80	100	5	0	5	3
18	BCA3C06	Theory Of Computation	20	80	100	5	0	5	3
Tot	al 5 Course	S			500	21	4	25	18
		IV Sem	est	er					

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			Internal	External	Total	Theory	Lab	Total	
19	XXXXA13	General Course III- Entrepreneurship	20	80	100	4	0	4	4
20	XXXXA14	Development General Course IV- Basics of Audio and	20	80	100	4	0	4	4
	BCA4B05	Video Database Management	20	80	100	3	4	7	4
21	BCA4B06	System and RDBMS  Programming Laboratory II:  Lab Exam of 3 <sup>rd</sup> & 4 <sup>th</sup> Sem.	20	80	100	0	0	0	2
22	BCA4B00	Data Structures & RDBINIS	20	80	100	5	0	5	3
23	BCA4C07	E-Commerce	20	80	100	5	0	5	3
24	BCA4C08	Computer Graphics	20	1	600	21	4	25	20

			Marks			Contact Hours			
Course Code	Course Title	Internal	External	Total	Theory	Lab	Total	Credit	
200		D mamming	20	80	100	3	3	6	4
25	BCA5B07	Java Programming							4
00	BCA5B08	Computer Organization And	20	80	100	5	0	5	4
26 BCA5B08	Architecture			100	3	3	6	4	
	POLEBOO	Web Programming	20	80	100	3	-	-	-
27/	BCA5B09	Using PHP Principles of Software	20	80	100	4	0	4	4
28	BCA5B10	Engineering	-	10	50	2	0	2	2
	XXX5DXX	Open Course(Other	10	40	. 50	1		+	1
29	TYYOUA	Streams)	0	0	. 0	0	2	2	0
		Project Work			450	17	8	25	1

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Course No				Marks Contact Hours			ours	Credit	
	Course Code	Course Title	Internal	External	Total	Theory	Lab	Total	
30	BCA6B11	Android programming	20	80	100	4	1	5	4
31	BCA6B12	Operating Systems	20	80	100	4	1	5	4
32	BCA6B13	Computer Networks	20,	80	100	5	0	5	4
33	BCA6B14	Programming laboratory III- Java and Web Programming	20	80	100	0	0	0	2
34	BCA6B15	Programming Laboratory IV: Lab Exam of Android & Linux shell Programming	20	80	100	0	4	4	2
35	BCA6B16	Project and Viva Voce	30	120	150	0	2	2	3
36	BCA6B17x	Elective	20	80	100	4	0	4	3
Total 7 Courses				750	17	8	25	22	