

**MANGALORE UNIVERSITY**  
**Bachelor of Computer Applications (BCA) Degree Programme Pattern and Scheme of Examinations**

**I SEMESTER**

Group	Course Code	Course	Instruction Hours/Week	Duration of exams (Hrs)	Marks & Credits			
					IA	Exam	Total	Credits
I	BCAC131	Fundamentals of Information Technology	4	3	20	80	100	2
	BCAC132	Problem Solving using C	4	3	20	80	100	2
	BCAC133	Computer Organization	4	3	20	80	100	2
	BCAP134	Office Automation Lab	4	3	20	80	100	2
	BCAP135	C Programming Lab	4	3	20	80	100	2
II	BCACE136 BCACE137	E1 : Internet Basics & HTML E2: Cloud Computing	2	2	10	40	50	1
III		Foundation Language-I	4	3	20	80	100	2
		Foundation Language-II	4	3	20	80	100	2
		Elective Foundation	2	2	10	40	50	1
IV		EC & CC	2	2	50	-	50	1
		<b>Total</b>	36	27	210	640	850	17

**II SEMESTER**

Group	Course Code	Course	Instruction Hours/Week	Duration of exams (Hrs)	Marks & Credits			
					IA	Exam	Total	Credits
I	BCAC181	Basic Mathematics	4	3	20	80	100	2
	BCAC182	Object Oriented Programming using C++	4	3	20	80	100	2
	BCAC183	Database Concepts and Oracle	4	3	20	80	100	2
	BCAP184	C++ Lab	4	3	20	80	100	2
	BCAP185	DBMS Lab	4	3	20	80	100	2
II	BCACE186 BCACE187 BCACE188	E1 : Internet of Things E2: Big Data Analytics E3: Artificial Intelligence	2	2	10	40	50	1
III		Foundation Language-I	4	3	20	80	100	2
		Foundation Language-II	4	3	20	80	100	2
		Elective Foundation	2	2	10	40	50	1
IV		EC & CC	2	2	50	-	50	1
		<b>Total</b>	34	27	210	640	850	17

**MANGALORE UNIVERSITY**

**Bachelor of Computer Applications (BCA) Degree Programme Pattern and Scheme of Examinations**

**III SEMESTER**

Group	Course Code	Course	Instruction Hours/Week	Duration of exams (Hrs)	Marks & Credits			
					IA	Exam	Total	Credits
I	BCAC231	Operating Systems & Linux	4	3	20	80	100	2
	BCAC232	Data Structures	4	3	20	80	100	2
	BCAC233	Visual Basic .NET Programming	4	3	20	80	100	2
	BCAP234	Operating Systems and Data Structures lab	4	3	20	80	100	2
	BCAP235	VB.Net Lab	4	3	20	80	100	2
II	BCACE236	E1 : Hardware & PC Maintenance	2	2	10	40	50	1
	BCACE237	E2 : Desktop Publishing						
III		Foundation Language-I	4	3	20	80	100	2
		Foundation Language-II	4	3	20	80	100	2
		Elective Foundation	2	2	10	40	50	1
IV		EC &CC	2	2	50	-	50	1
		<b>Total</b>	<b>36</b>	<b>27</b>	<b>210</b>	640	850	17

**BCA206: Elective Courses:** Course Detailed are attached in APPENDIX I

**IV SEMESTER**

Group	Course Code	Course	Instruction Hours/Week	Duration of exams (Hrs)	Marks & Credits			
					IA	Exam	Total	Credits
I	BCAC281	Computer Graphics and Animation	4	3	20	80	100	2
	BCAC282	Java Programming	4	3	20	80	100	2
	BCAC283	E1: Data Mining	4	3	20	80	100	2
	BCAC284	E2: CONA						
	BCAC285	E3: Business Statistics & Mathematics						
		BCAP286	Computer Graphics and Animation Lab	4	3	20	80	100
	BCAP287	Java Lab	4	3	20	80	100	2
II	BCAOE288	E1 : Fundamentals of ICT	2	2	10	40	50	1
	BCAOE289	E2: E-Commerce						
III		Foundation Language-I	4	3	20	80	100	2
		Foundation Language-II	4	3	20	80	100	2
		Elective Foundation	2	2	10	40	50	1
IV		EC &CC	2	2	50	-	50	1
		<b>Total</b>	<b>36</b>	<b>27</b>	<b>210</b>	640	850	17

**MANGALORE UNIVERSITY**  
**Bachelor of Computer Applications (BCA) Degree Programme Pattern and Scheme of Examinations**

**V SEMESTER**

Group	Course Code	Course Particulars	Instruction Hours/Week	Duration of exams (Hrs)	Marks & Credits			
					IA	Exam	Total	Credits
I	BCAC331	Software Engineering	4	3	20	80	100	2
	BCAC332	Computer & Communication Networks	4	3	20	80	100	2
	BCAC333	Distributed Computing	4	3	20	80	100	2
	BCAC334	Web Technology	4	3	20	80	100	2
	BCAC335	Python Programming	4	3	20	80	100	2
	BCAC336	E1: Accounting & Financial Management	4	3	20	80	100	2
	BCAC337	E2: Android Application Development						
	BCAC338	E3: SciLab Programming						
	BCAP339	Web Applications Lab	3	3	20	80	100	2
	BCAP340	Python Programming Lab	3	3	20	80	100	2
BCAP341	E1:AFM Lab /	3	3	20	80	100	2	
BCAP342	E2: AAD Lab /							
BCAP343	E3: SciLab							
		<b>Total</b>	<b>33</b>	<b>27</b>	<b>180</b>	<b>720</b>	<b>900</b>	<b>18</b>

**VI SEMESTER**

Group	Course Code	Course Particulars	Instruction Hours/Week	Duration of exams (Hrs)	Marks & Credits			
					IA	Exam	Total	Credits
I	BCAC381	E-Commerce	4	3	20	80	100	2
	BCAC382	Network Security & Management	4	3	20	80	100	2
	BCAC383	Software Testing	4	3	20	80	100	2
	BCAC384	E1: Programming for Analytics	4	3	20	80	100	2
	BCAC385	E2: Business Statistics with R						
	BCAC386	E3: Multivariate Data Analysis						
	BCAC387	Project Work	20	3	100	Reports - 300 Presentation and Viva - 100 Total: 400	500	10
		<b>Total</b>	<b>36</b>	<b>27</b>	<b>180</b>	<b>720</b>	<b>900</b>	<b>18</b>

**Total Marks : 5200**

**Grand Total Credit for three year BCA Degree Programme: 104**