



# VIVEKANANDA GLOBAL UNIVERSITY, JAIPUR

**(Established by Rajasthan State Legislature and covered u/s 2(f) of the UGC Act, 1956)**

## **FACULTY OF ENGINEERING & TECHNOLOGY**

### **SCHEME & SYLLABUS**

**FOR**

### **Bachelor of Computer Application (Computer Science & Application)**

(Implemented from Academic session 2018-19 and also for students admitted in 2017-18)

Sem	I	II	III	IV	V	VI	Total
Credits	22	22	22	22	24	20	132

**Total Credits:** (I to VI Semester) = 132

**SESSION: 2018-19**

---

VIT Campus, Sector-36, NRI Road, Sisyawas, Jagatpura, Jaipur (Raj.)-303012  
Ph.: 0141-4077999 Fax: 4077900; Email: [info@vgu.ac.in](mailto:info@vgu.ac.in) Website: [www.vgu.ac.in](http://www.vgu.ac.in)

# VIVEKANANDA GLOBAL UNIVERSITY, JAIPUR

## TEACHING AND EXAMINATION SCHEME FOR BCA (COMPUTER SCIENCE & APPLICATIONS)

### I SEM

Course Code	Course Type	Course Name	L*	T*	P*	CP*	Contact Hours
MAT 195	BS	Basic Mathematics	3	1	-	3.5	4
BCA 101	PC	Fundamental of C	3	1	-	3.5	4
BCA 102	PC	Office Automation Tools	3	-	-	3	3
BCA 103	PC	Basic Electronics	3	-	-	3	3
BCA 104	PC	Principle of Programming Languages	3	-	-	3	3
BCA 105	PC	Fundamental of C Lab	-	-	4	2	4
BCA 106	PC	PC Software & Automation Lab	-	-	4	2	4
ENG 115	ENG	Soft Skill & Professional Aptitude	-	-	2	1	2
MGT 201	HSM	Orientation Program in Entrepreneurship	-	-	2	1	2
<b>Total</b>			<b>15</b>	<b>2</b>	<b>12</b>	<b>22</b>	<b>29</b>

L\*-Lecture, T\*-Tutorial, P\*-Practical, \*CP-Credit Point

**TEACHING AND EXAMINATION SCHEME FOR  
BCA  
(COMPUTER SCIENCE & APPLICATIONS)**

**II SEM**

<b>Course Code</b>	<b>Course Type</b>	<b>Course Name</b>	<b>L*</b>	<b>T*</b>	<b>P*</b>	<b>CP*</b>	<b>Contact Hours/Week</b>
MAT 107	BS	Discrete Mathematical Structures	3	1	-	3.5	4
BCA 201	PC	Object Oriented Programming with C++	3	1	-	3.5	4
BCA 202	PC	Data Structure And Algorithms	3	-	-	3	3
BCA 203	PC	Management information system	3	-	-	3	3
BCA 204	PC	E-Commerce	3	-	-	3	3
BCA 205	PC	Object Oriented Programming with C++Lab	-	-	4	2	4
BCA 206	PC	Data Structures Lab	-	-	4	2	4
MGT 110	HSM	General Aptitude	-	-	2	1	2
MGT 202	HSM	Basic Program in Entrepreneurship	-	-	2	1	2
<b>Total</b>			<b>15</b>	<b>2</b>	<b>12</b>	<b>22</b>	<b>29</b>

L\*-Lecture, T\*-Tutorial, P\*-Practical,\*CP-Credit Point

**VIVEKANANDA GLOBAL UNIVERSITY, JAIPUR**  
**TEACHING AND EXAMINATION SCHEME FOR**  
**BCA**  
**(COMPUTER SCIENCE & APPLICATIONS)**  
**III SEM**

Course Code	Course Type	Course Name	L*	T*	P*	CP*	Contact Hours/Week
BCA 301	PC	Database Management Systems	3	-	-	3	3
BCA 302	PC	Software Engineering	3	-	-	3	3
BCA 303	PC	Computer Networks	3	-	-	3	3
BCA 304	BS	Internet & Web Technologies	3	-	-	3	3
BCA*	PE	<b>Program Elective Course-1</b>	3	-	-	3	3
BCA 308	PC	Database Management System Lab	-	-	4	2	4
BCA 309	PC	Software Engineering Lab	-	-	4	2	4
BCA 310	PC	Internet & Web Programming Lab	-	-	4	2	4
MGT 203	HSM	Foundation Program in Entrepreneurship	-	-	2	1	2
<b>Total</b>			<b>15</b>	<b>0</b>	<b>14</b>	<b>22</b>	<b>29</b>
L*-Lecture, T*-Tutorial, P*-Practical,*CP-Credit Point							

**Program Elective Course:-1**

BCA 305 Multimedia System

BCA 306 Programming in C#

BCA 307 Programming in python

**TEACHING AND EXAMINATION SCHEME FOR  
BCA  
(COMPUTER SCIENCE & APPLICATIONS)  
IV SEM**

Course Code	Course Type	Course Name	L*	T*	P*	CP*	Contact Hours/Week
BCA 401	PC	Programming in Java	3	-	-	3	3
BCA 402	PC	Operating System	3	-	-	3	3
BCA 403	PC	Computer Graphics and Visualization	3	-	-	3	3
BCA 404	PC	Linux & Shell Programming	3	-	-	3	3
BCA*	PE	<b>Program Elective Course-2</b>	3	-	-	3	3
BCA 409	PC	Linux & Shell Programming Lab	-	-	4	2	4
BCA 410	PC	Computer Graphics Lab	-	-	4	2	4
BCA 411	PC	Programming in Java Lab	-	-	4	2	4
MGT204	HSM	Intermediate Program in Entrepreneurship	-	-	2	1	2
<b>Total</b>			<b>15</b>	<b>0</b>	<b>14</b>	<b>22</b>	<b>29</b>

L\*-Lecture, T\*-Tutorial, P\*-Practical,\*CP-Credit Point

**Program Elective Course:-2**

BCA 405 Cloud Computing

BCA 406 Artificial Intelligence

BCA 407 Big Data & Hadoop

BCA 408 Advance Data Structures

<b>VIVEKANANDA GLOBAL UNIVERSITY, JAIPUR</b>							
<b>TEACHING AND EXAMINATION SCHEME FOR</b>							
<b>BCA</b>							
<b>(COMPUTER SCIENCE &amp; APPLICATIONS)</b>							
<b>V SEM</b>							
<b>Course Code</b>	<b>Course Type</b>	<b>Course Name</b>	<b>L*</b>	<b>T*</b>	<b>P*</b>	<b>CP*</b>	<b>Contact Hours/Week</b>
BCA 501	PC	Information System Security	3	-	-	3	3
BCA 502	PC	Software Project Management	3	-	-	3	3
BCA 503	PC	.NET Framework	3	-	-	3	3
BCA 504	PC	Data Communication	3	-	-	3	3
BCA*	PE	Program Elective Course-3	3	-	-	3	3
BCA 508	OE	Skill Development Lab-II (.NET Framework Lab)	-	-	2	1	2
BCA 509	PC	Cyber Security Lab	-	-	4	2	4
BCA 510	PR	Project Lab	-	-	4	2	4
MGT103	HSM	Project Formulation and Appraisal	-	-	2	1	2
BCA 511	ST	Seminar	-	-	4	2	4
BCA 512	PC	Campus Recruitment Training	-	-	2	1	2
<b>Total</b>			<b>15</b>	<b>0</b>	<b>18</b>	<b>24</b>	<b>33</b>
L*-Lecture, T*-Tutorial, P*-Practical,*CP-Credit Point							

**Program Elective Course:-3**

BCA 505 Distributed Systems

BCA 506 Cyber Crime & IT Law

BCA 507 Real Time Systems

**VIVEKANANDA GLOBAL UNIVERSITY, JAIPUR**  
**TEACHING AND EXAMINATION SCHEME FOR**  
**BCA**  
**(COMPUTER SCIENCE & APPLICATIONS)**  
**VI SEM**

<b>Code</b>	<b>Course Type</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>Contact Hours/Week</b>
BCA 601	ST	Practical Training in Industry(one semester)	-	-	-	20	NA
		<b>Total</b>	-	-	-	<b>20</b>	NA