



# 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 Technology (Computer Science & Engineering)**

(Implemented from Academic session 2018-19 and also for students admitted in 2015-16, 2016-17 and 2017-18)

Sem	III	IV	V	VI	VII	VIII	Total
Credits	22	26	24	24	21	16	133

**Total Credits:** 50 (I &II Semester) + 133 (III to VIII Semester) = 183

**SESSION: 2018-19**

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# VIVEKANANDA GLOBAL UNIVERSITY, JAIPUR

## TEACHING AND EXAMINATION SCHEME FOR B.TECH. (COMPUTER SCIENCE & ENGINEERING)

### SEMESTER-III

Course code	Course type	Course Name	Teaching Scheme			Total Hour	Credit
			L*	T*	P*		
MAT 105	BS	Advance Engineering Mathematics	3	1	-	4	3.5
BEC 301	OE	Electronics Devices and Circuits	3	-	-	3	3
BEC 303	OE	Digital Electronics	3	-	-	3	3
BCS 301	PC	Data Structure And Algorithms	3	-	-	3	3
BCS 302	PC	Object Oriented Programming with C++	3	1	-	4	3.5
BCS 304	PC	Data Structures Lab	-	-	2	2	1
BEC 306	OE	Electronics Devices and Circuits lab	-	-	2	2	1
BEC 307	OE	Digital Electronics lab	-	-	2	2	1
BCS305	PC	Object Oriented Programming with C++Lab			2	2	1
ENG 115	ENG	Soft Skill & Professional Aptitude	-	-	2	2	1
MGT 201	HSM	Orientation Program in Entrepreneurship	-	-	2	2	1
		<b>Total</b>	<b>15</b>	<b>2</b>	<b>12</b>	<b>29</b>	<b>22</b>

L\*-Lecture\*, T\*-Tutorial, P\*-Practical

# VIVEKANANDA GLOBAL UNIVERSITY, JAIPUR

## TEACHING AND EXAMINATION SCHEME FOR B.TECH. (COMPUTER SCIENCE & ENGINEERING)

### SEMESTER-IV

Course code	Course type	Course Name	Teaching Scheme			Total Hour	Credit
			L*	T*	P*		
MAT 107	BS	Discrete Mathematical Structures	3	1	-	4	3.5
MAT 108	BS	Statistics & Probability Theory	3	1	-	4	3.5
BEC 402	OE	Microprocessor and Interfacing	3	-	-	3	3
BEC 405	OE	Analog Communication	3	1	-	4	3.5
BCS 401	PC	Database Management Systems	3	-	-	3	3
BCS 402	PC	Software Engineering	3	1	-	4	3.5
MGT 110	HSM	General Aptitude	-	-	2	2	1
BEC 409	OE	Analog Communication Lab	-	-	2	2	1
BCS 404	PC	Database Management System Lab	-	-	2	2	1
BEC 407	OE	Microprocessor and Interfacing Lab	-	-	2	2	1
BCS 405	PC	SSD Lab	-	-	2	2	1
MGT 202	HSM	Basic Program in Entrepreneurship	-	-	2	2	1
		<b>Total</b>	<b>18</b>	<b>4</b>	<b>12</b>	<b>34</b>	<b>26</b>

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# VIVEKANANDA GLOBAL UNIVERSITY, JAIPUR

## TEACHING AND EXAMINATION SCHEME FOR B.TECH. (COMPUTER SCIENCE & ENGINEERING)

### SEMESTER-V

Course code	Course type	Course Name	Teaching Scheme			Total Hour	Credit
			L*	T*	P*		
BCS 501	PC	Operating System	3	-	-	3	3
BCS 502	PC	Design & Analysis of Algorithms	3	1	-	4	3.5
BCS 503	PC	Theory of Computation	3	1	-	4	3.5
BCS 504	PC	Computer Organization & Design	3	-	-	3	3
BEC 502	OE	Microcontroller & Embedded Systems	3	-	-	3	3
BCS*	PE	<b>Program Elective Course-I</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>3</b>
BCS 506	PC	Operating System Lab	-	-	2	2	1
BCS 507	PC	Computer Architecture Lab	-	-	2	2	1
BCS 508	PC	Programming in java Lab	-	-	2	2	1
BCS 509	PC	Skill Development Lab-I Python Programming Lab	-	-	2	2	1
MGT 203	HSM	<b>Foundation Program in Entrepreneurship</b>	-	-	2	2	1
		<b>Total</b>	<b>18</b>	<b>2</b>	<b>10</b>	<b>30</b>	<b>24</b>

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#### **Program Elective Course-I**

BCS511 Programming in Java

BCS515 Principle of Programming Language

BCS512 Programming in C#

BCS516 Advance Software Engineering

BCS513 Programming in python

BCS517 Management information system

BCS514 Cyber Crime & IT Law

# VIVEKANANDA GLOBAL UNIVERSITY, JAIPUR

## TEACHING AND EXAMINATION SCHEME FOR B.TECH. (COMPUTER SCIENCE & ENGINEERING)

### SEMESTER-VI

Course code	Course type	Course Name	Teaching Scheme			Total Hour	Credit
			L*	T*	P*		
BCS 601	PC	Computer Networks	3	-	-	3	3
BCS 602	PC	Compiler Design	3	-	-	3	3
BCS 603	PC	Data Mining & Ware Housing	3	-	-	3	3
BCS 604	PC	Computer Graphics and Visualization	3	-	-	3	3
BCS 605	PC	Linux & Shell Programming	3	-	-	3	3
BCS*	PE	Program Elective Course-II	3	-	-	3	3
BCS 607	PC	Computer Network Lab	-	-	2	2	1
BCS 608	PC	Compiler Design Lab	-	-	2	2	1
BCS 609	PC	Data Mining and Ware Housing Lab	-	-	2	2	1
BCS 610	PC	Computer Graphics Lab	-	-	2	2	1
BCS 611	PC	Backtrack Lab (Linux Lab)	-	-	2	2	1
MGT 204	HSM	Intermediate Program in Entrepreneurship	-	-	2	2	1
		Total	18	-	12	30	24

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### Program Elective Course-II

BEC608 Information Theory and Coding

BCS615 Artificial Intelligence

BEC603 Digital Signal Processing

BCS616 Big Data & Hadoop

BCS613 Advance Data Structures

BCS617 Cloud Computing

BCS614 Logic Synthesis

BCS 619 Multimedia System

# VIVEKANANDA GLOBAL UNIVERSITY, JAIPUR

## TEACHING AND EXAMINATION SCHEME FOR B.TECH. (COMPUTER SCIENCE & ENGINEERING)

### SEMESTER-VII

Course Code	Course Type	Course Name	Teaching Scheme			Total Hour	Credit
			L*	T*	P*		
BCS 701	PC	Information System Security	3	-	-	3	3
BCS 702	PC	Image Processing	3	-	-	3	3
BCS*	PE	<b>Program Elective Course -III</b>	3	-	-	3	3
BCS*	PE	<b>Program Elective Course - IV</b>	3	-	-	3	3
BCS 704	PC	Programming Using Mat Lab	-	-	2	2	1
BCS 720	PC	Skill Development Lab-II (.NET Framework)	-	-	2	2	1
BCS 705	PC	Cyber Security Lab	-	-	2	2	1
BCS 706	PR	Project Lab	-	-	4	4	2
MGT 103	HSM	Project Formulation and Appraisal	-	-	2	2	1
BCS 707	ST	Seminar	-	-	2	2	1
BCS 719	PC	Campus Recruitment Training	-	-	4	4	2
		Total	<b>12</b>	<b>-</b>	<b>18</b>	<b>30</b>	<b>21</b>

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#### Program Elective Course-III

BCS 709 Advance computer Architectures  
 BCS 710 Distributed Systems  
 BEC 710 Digital System Design Using VHDL  
 BCS 711 Advance Java  
 BCS 712 High Speed Network

#### Program Elective Course -IV

BCS 713 Advance Object oriented Programming in C++.  
 BEC 703 Wireless Communication  
 BCS 714 Real Time Systems  
 BCS 715 Parallel Computing  
 BCS 716-Software Project management

# **VIVEKANANDA GLOBAL UNIVERSITY, JAIPUR**

## **TEACHING AND EXAMINATION SCHEME FOR B.TECH. (COMPUTER SCIENCE & ENGINEERING)**

### **SEMESTER-VIII**

Course code	Course type	Course Name	Teaching Scheme			Total Hour	Credit
			L*	T*	P*		
BCS 801	ST	Practical Training in Industry (one semester)	-		-	-	16

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