

**BE (COMPUTER SCIENCE AND BUSINESS SYSTEM) -2019
Scheme**

SEMESTER-I

S. N.	COURSE NO.	TITLE	L	T	P	CR
1	UCT101	DISCRETE MATHEMATICS (PCC-CS401)	3	1	0	3.5
2	UCT102	INTRODUCTORY TOPICS IN STATISTICS, PROBABILITY AND CALCULUS	3	0	0	3
3	UCT103	FUNDAMENTALS OF COMPUTER SCIENCE	3	0	4	5
4	UEE002	PRINCIPLES OF ELECTRICAL ENGINEERING	2	0	2	3
5	UPH009	FUNDAMENTALS OF PHYSICS	2	0	2	3
6	UHU011	BUSINESS COMMUNICATION & VALUE SCIENCE - I	2	0	0	2
7		INDUCTION PROGRAM (NON CREDIT)				
		TOTAL	15	1	8	19.5

SEMESTER-III

S. N.	COURSE NO.	TITLE	L	T	P	CR
1		FORMAL LANGUAGE AND AUTOMATA THEORY (PCC-CS502)	3	0	0	3.0
2		COMPUTER ORGANIZATION & ARCHITECTURE (PCC-CS402)	3	0	4	5.0
3		OBJECT ORIENTED PROGRAMMING (PCC-CS503) + LAB	2	0	4	4.0
4		COMPUTATIONAL STATISTICS + LAB	3	0	2	4.0
5		SOFTWARE ENGINEERING + LAB	3	0	2	4.0
6		INDIAN CONSTITUTION (Non-Credit)				
		TOTAL	14	0	12	20.0

SEMESTER-V

S. N.	COURSE NO.	TITLE	L	T	P	CR
1		DESIGN AND ANALYSIS OF ALGORITHMS (PCC-CS404) + Lab	3	0	4	5.0
2		COMPILER DESIGN (PCC-CS601)+ LAB (LEX & YACC)	3	0	4	5.0
3		FUNDAMENTALS OF MANAGEMENT	2	0	0	2.0
4		BUSINESS STRATEGY	2	0	0	2.0
5		BUSINESS COMMUNICATION & VALUE SCIENCE-III	2	0	0	2.0
6		ELECTIVE II**	3	0	2	4.0
7		ELECTIVE I + LAB**	2	1	2	3.5
8		MINI PROJECT	0	0	2	1.0
		TOTAL	17	1	14	24.5

SEMESTER-II

S. N.	COURSE NO.	TITLE	L	T	P	CR
1		LINEAR ALGEBRA	3	1	0	3.5
2		STATISTICAL MODELING + LAB	3	1	0	3.5
3		DATA STRUCTURES & ALGORITHMS (PCC-CS301) + LAB	3	1	4	5.5
4		PRINCIPLES OF ELECTRONICS + LAB	2	0	2	3.0
5		FUNDAMENTALS OF ECONOMICS	2	0	0	2.0
6		BUSINESS COMMUNICATION & VALUE SCIENCE -II	2	0	0	2.0
7		ENVIRONMENTAL SCIENCES (Non-Credit)				
		TOTAL	15	3	6	19.5
4 Weeks – Exchange Program among the Participating Institutes						

SEMESTER-IV

S. N.	COURSE NO.	TITLE	L	T	P	CR
1		OPERATING SYSTEMS (PCC-CS403) + LAB (UNIX)	3	0	2	4.0
2		DATABASE MANAGEMENT SYSTEMS (PCC-CS503) + LAB	3	0	2	4.0
3		SOFTWARE DESIGN WITH UML + LAB	2	0	2	3.0
4		INTRODUCTION TO INNOVATION, IP MANAGEMENT AND ENTREPRENEURSHIP	3	0	0	3.0
5		DESIGN THINKING	2	0	2	3.0
6		OPERATIONS RESEARCH + LAB	2	0	2	3.0
7		MARKETING RESEARCH & MARKETING MANAGEMENT	2	0	0	2.0
7		ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE (Non-Credit)				
		TOTAL	17	0	10	22.0
4 Weeks – Exchange Program among the Participating Institutes						

SEMESTER-VI

S. N.	COURSE NO.	TITLE	L	T	P	CR
1		COMPUTER NETWORKS (PCC-CS602) + LAB	3	0	4	5.0
2		INFORMATION SECURITY + LAB	3	0	2	4.0
3		ARTIFICIAL INTELLIGENCE + LAB	3	0	2	4.0
4		FINANCIAL & COST ACCOUNTING	2	0	0	2.0
5		BUSINESS COMMUNICATION & VALUE SCIENCE-IV	2	0	2	3.0
6		ELECTIVE III + LAB**	3	0	2	4.0
7		ELECTIVE IV + LAB**	2	0	2	3.0
		TOTAL	18	0	14	25.0
Industrial Project (6-8 weeks)						

LIST OF PROFESSIONAL ELECTIVES

SEMESTER-VII

S. N.	COURSE NO.	TITLE	L	T	P	CR
1		USABILITY DESIGN OF SOFTWARE APPLICATIONS + LAB	2	0	1	2.5
2		IT WORKSHOP SKYLAB / MATLAB (PCC-CS302) + LAB	1	0	4	3.0
3		FINANCIAL MANAGEMENT	2.5	0	0	2.5
4		HUMAN RESOURCE MANAGEMENT	2	0	0	2.0
5		ELECTIVE V**	2	1	2	3.5
6		ELECTIVE VI + LAB**	2	1	2	3.5
7		SERVICES SCIENCE & SERVICE OPERATIONAL MANAGEMENT + LAB	3	0	2	4.0
8		IT PROJECT MANAGEMENT + LAB	3	0	2	4.0
		TOTAL	17.5	2	13	25.0

SEMESTER-VIII

S. N.	COURSE NO.	TITLE	L	T	P	CR
1		PROJECT EVALUATION I	0	0	2	1.0
		TOTAL	0	0	2	1.0

ELECTIVE I

S. N.	COURSE NO.	TITLE	L	T	P	CR
1		CONVERSATIONAL SYSTEMS	3	1	2	5.0
2.		CLOUD, MICROSERVICES AND APPLICATION	3	1	2	5.0
3.		MACHINE LEARNING	3	1	2	5.0

ELECTIVE II

S. N.	COURSE NO.	TITLE	L	T	P	CR
1		BEHAVIOURAL ECONOMICS	3	1	2	5.0
2.		COMPUTATIONAL FINANCE & MODELING	3	1	2	5.0
3.		PSYCHOLOGY	3	1	2	5.0

ELECTIVE III

S. N.	COURSE NO.	TITLE	L	T	P	CR
1		ROBOTICS AND EMBEDDED SYSTEMS	3	1	2	5.0
2.		MODERN WEB APPLICATIONS	3	1	2	5.0
3.		DATA MINING & ANALYTICS	3	1	2	5.0

ELECTIVE IV

S. N.	COURSE NO.	TITLE	L	T	P	CR
1		ENTERPRISE SYSTEMS	3	1	2	5.0
2.		ADVANCE FINANCE	3	1	2	5.0
3.		IMAGE RECOGNITION AND PATTERN RECOGNITION	3	1	2	5.0

ELECTIVE V

S. N.	COURSE NO.	TITLE	L	T	P	CR
1		COGNITIVE SCIENCE & ANALYTICS	3	1	2	5.0
2.		INTRODUCTION TO IOT	3	1	2	5.0
3.		CRYPTOLOGY	3	1	2	5.0

ELECTIVE VI

S. N.	COURSE NO.	TITLE	L	T	P	CR
1		QUANTUM COMPUTATION & QUATUM INFORMATION	3	1	2	5.0
2.		ADVANCED SOCIAL, TEXT AND MEDIA ANALYTICS	3	1	2	5.0
3.		MOBILE COMPUTING	3	1	2	5.0

SEMESTER WISE CREDITS FOR BE: COMPUTER SCIENCE & BUSINESS SYSTEMS

Nature of Course	Credits to be Earned(As per Choice Based Credit System)								Total
	Semesters								
	I	II	III	IV	V	VI	VII	VIII	
Core-Foundation Courses	13	14	0	11	6	5	4.5	0	53.5
Core-Professional Courses	6.5	5.5	20	11	10	13	13.5	0	79.5
Professional & Generic Electives	0	0	0	0	7.5	7	7	0	21.5
Project Based Courses	0	0	0	0	1	0	0	1	2
Total									156.5

Nature of Course	Colour Scheme
Core-Foundation Courses	
Core-Professional Courses	
Generic Electives	
Professional Electives	
Project Based Courses	