

B.Tech. Computer Science and Business Systems Curriculum – R2023

SEMESTER I

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
Induction Program								
THEORY								
1	U23MA203	Linear Algebra	BS	4	3	1	0	4
2	U23CS301	Problem Solving using C	ES	3	3	0	0	3
THEORY CUM PRACTICALS								
3	U23HS182	Business Communication and Value Science	HS	4	2	0	2	3
4	U23PH281	Physics for Information Sciences	BS	5	3	0	2	4
5	U23EC381	Electronics and Microprocessors	ES	5	3	0	2	4
PRACTICALS								
6	U23GE351	Engineering Practices Laboratory	ES	2	0	0	2	1
7	U23CS351	Problem Solving using C Laboratory	ES	4	0	0	4	2
PROFESSIONAL DEVELOPMENT								
8	U23EM751	Soft Skills	EM	2	0	0	2	1
MANDATORY COURSE								
9	U23MC901	தமிழ்மரபு/ Heritage Of Tamils	HSMC	1	1	0	0	1
Total				30	15	1	14	23

SEMESTER II

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	U23MA210	Probability and Descriptive Statistics	BS	4	3	1	0	4
2	U23CS401	Data Structures	PC	3	3	0	0	3
3	U23CS402	Object Oriented Programming using C++	PC	3	3	0	0	3
	U23NCC01	NCC Credit Course Level 1#	-	2	2	0	0	2#
THEORY CUM PRACTICALS								
4	U23HS186/ U23HS1XX	Corporate Communication and Life Skills/Language Elective	HS	4	2	0	2	3
5	U23CS381	Application Design and Development	ES	4	2	0	2	3
6	U23CS382	Python Programming	ES	5	3	0	2	4
PRACTICALS								
7	U23CS451	Data Structures Laboratory	PC	4	0	0	4	2
8	U23CS452	Object Oriented Programming using C++ Laboratory	PC	2	0	0	2	1
PROFESSIONAL DEVELOPMENT								
9	U23EM752	Logical Thinking	EM	2	0	0	2	1
MANDATORY COURSE								
10	U23MC902	தமிழ்ரும் தொழில்நுட்பமும் /Tamils and Technology	HSMC	1	1	0	0	1
Total				32	17	1	14	25

SEMESTER III

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	U23MA204	Discrete Mathematics	BS	4	3	1	0	4
2	U23CS403	Design and Analysis of Algorithms	PC	3	3	0	0	3
3	U23CS404	Database Management Systems	PC	3	3	0	0	3
4	U23CS405	Java Programming	PC	3	3	0	0	3
THEORY CUM PRACTICALS								
5	U23MA281	Business Analytics	BS	4	2	0	2	3
6	U23EC382	Digital Principles and Computer Organization	ES	5	3	0	2	4
PRACTICALS								
7	U23CS453	Design and Analysis of Algorithms Laboratory	PC	4	0	0	4	2
8	U23CS454	Database Management Systems Laboratory	PC	2	0	0	2	1
9	U23CS455	Java Programming Laboratory	PC	2	0	0	2	1
PROFESSIONAL DEVELOPMENT								
10	U23EM753	Advanced Logical Thinking	EM	2	0	0	2	1
MANDATORY COURSE								
	U23MC903	Environmental Science	MC	1	1	0	0	NC
Total				33	18	1	14	25

SEMESTER IV

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	U23CB101	Introduction to Innovation, IP ,Management and Entrepreneurship	HS	3	3	0	0	3
2	U23CB401	Operating Systems	PC	3	3	0	0	3
3	U23CS406	Full Stack Development	PC	3	3	0	0	3
4	U23XXXXX	Professional Elective-I*	PE	3	3	0	0	3
	U23NCC02	NCC Credit Course Level 2 [#]	-	3	3	0	0	3 [#]
THEORY CUM PRACTICALS								
5	U23MA282	Computational Statistics	BS	5	3	0	2	4
6	U23EC383	Embedded Systems and IOT	ES	5	3	0	2	4
PRACTICALS								
7	U23CB451	Operating Systems Laboratory	PC	2	0	0	2	1
8	U23CS456	Full Stack Development Laboratory	PC	2	0	0	2	1
PROJECT WORK								
9	U23CB651	Project using Design Thinking(Product/Software Development Life Cycle)	PW	2	0	0	2	1
PROFESSIONAL DEVELOPMENT								
10	U23EM754	Summer Internship	EM	-	-	-	-	1
MANDATORY COURSE								

	U23MC904	Universal Human Values	MC	1	1	0	0	NC
		Total		29	19	0	10	24

#-Offered only for NCC students

*-L T P C either 3 0 0 3 or 2 0 2 3

SEMESTER V

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	U23AM404	Artificial Intelligence and Machine Learning	PC	3	3	0	0	3
2	U23CS407	Automata theory and Compiler Design	PC	4	3	1	0	4
3	U23XXXXX	Open Elective I*	OE	3	3	0	0	3
THEORY CUM PRACTICALS								
4	U23AD481	Data Science	PC	5	3	0	2	4
5	U23IT481	Software Engineering	PC	4	2	0	2	3
6	U23EC484	Computer Networks	PC	5	3	0	2	4
PRACTICALS								
7	U23AM454	Artificial Intelligence and Machine Learning Laboratory	PC	2	0	0	2	1
8	U23ICXXX	Industry Oriented Course	EM	2	0	0	2	1
Total				28	17	1	10	23

*-L T P C either 3 0 0 3 or 2 0 2 3

SEMESTER VI

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	U23CS408	Cryptography and Cyber Security	PC	3	3	0	0	3
2	U23IT402	Cloud Computing	PC	3	3	0	0	3
3	U23CB102	Managerial Economics	HS	4	3	1	0	4
4	U23XXXXX	Professional Elective II*	PE	3	3	0	0	3
5	U23XXXXX	Professional Elective III*	PE	3	3	0	0	3
	U23NCC03	NCC Credit Course Level 3#	-	3	3	0	0	3#
PRACTICALS								
6	U23CS457	Cyber Security Laboratory	PC	2	0	0	2	1
7	U23IT451	Cloud Computing Laboratory	PC	2	0	0	2	1
PROJECT WORK								
8	U23CB652	Innovative / Multi-Disciplinary Project	PW	2	0	0	2	1
Total				22	15	1	6	19

*-L T P C either 3 0 0 3 or 2 0 2 3

SEMESTER VII

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	U23CB404	Business Strategy	PC	3	3	0	0	3
2	U23XXXXX	Professional Elective IV*	PE	3	3	0	0	3
3	U23XXXXX	Open Elective II*	OE	3	3	0	0	3
4	U23XXXXX	Open Elective III*	OE	3	3	0	0	3
THEORY CUM PRACTICALS								
4	U23CB403	IT Project Management	PC	4	2	0	2	3
PROJECT WORK								
5	U23CB653	Project Work-Phase I	PW	6	0	0	6	3
Total				22	14	0	8	18

*-L T P C either 3 0 0 3 or 2 0 2 3

SEMESTER VIII

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
PROJECT WORK								
1	U23CB654	Project Work-Phase II	PW	16	0	0	16	8
Total				16	0	0	16	8

*-L T P C either 3 0 0 3 or 2 0 2 3

Total Credits: 165

Credit Summary

Sl. No.	Category	I	II	III	IV	V	VI	VII	VIII	Credits	Credit %
1	HS	3	3	0	3	-	4	-	-	13	7.88
2	BS	8	4	7	4	-	-	-	-	23	13.94
3	ES	10	7	-	4	-	-	-	-	21	12.73
4	PC	-	9	17	8	19	8	6	-	67	40.61
5	PE	-	-	-	3	-	6	3	-	12	7.27
6	OE	-	-	-	-	3	-	6	-	9	5.45
7	PW	-	-	-	1	-	1	3	8	13	7.88
8	EM	1	1	1	1	1	-	-	-	5	3.03
9	NC	-	-	✓	✓	✓	-	-	-	0	0.00
10	MC	-	-	✓	-	✓	-	-	-	0	0.00
11	HSMC	1	1	-	-	-	-	-	-	2	1.21
Total		23	25	25	24	23	19	18	8	165	100%