

B.Tech. INFORMATION TECHNOLOGY
REGULATIONS – 2021
CHOICE BASED CREDIT SYSTEM
CURRICULUM FOR I - VIII SEMESTERS
SEMESTER I

SI.NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	J	C	
THEORY COURSES									
1	U21MA101	Calculus and Differential Equations	BSC	3	1	0	0	4	
2	U21EEG01	Basics of Electrical and Electronics Engineering	ESC	3	0	0	0	3	
THEORY COURSE WITH LABORATORY COMPONENT									
3	U21EN101	English for Technologists	HSMC	1	0	2	0	2	
4	U21PH101	Engineering Physics	BSC	2	0	2	0	3	
5	U21CY101	Engineering Chemistry	BSC	2	0	2	0	3	
6	U21CSG01	Problem Solving and C Programming	ESC	2	0	2	0	3	
7		NCC Credit Course Level 1*	-	1	0	2	0	2	
LABORATORY COURSES									
8	U21MEG01	Engineering Graphics	ESC	0	0	4	0	2	
MANDATORY NON CREDIT COURSES									
9	U21MYC01	Induction program	MNC	Three Weeks					
TOTAL				13	1	12	0	20	

SEMESTER II

SI.NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	J	C
THEORY COURSES								
1	U21MA203	Fourier Analysis and Partial Differential Equations	BSC	3	1	0	0	4
2	U21IT201	Fundamentals of Communication Systems	PCC	3	0	0	0	3
3	U21PH201	Material Science	BSC	2	0	0	0	2
THEORY COURSE WITH LABORATORY COMPONENT								
4	U21EN201	Personality Enhancement	HSMC	1	0	2	0	2
5	U21CSG02	Python Programming	ESC	2	0	2	0	3

6	U21ECG01	Digital Electronics	ESC	2	0	2	0	3
7		NCC Credit Course Level 2*	-	1	0	2	0	2
LABORATORY COURSES								
8	U21MEG02	Manufacturing Practices	ESC	0	0	4	0	2
MANDATORY NON CREDIT COURSES								
9	U21MYC02	Environmental Sciences	MNC	3	0	0	0	0
TOTAL				16	2	10	0	19

SEMESTER III

SI.NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	J	C
THEORY COURSES								
1	U21MA204	Numerical Methods	BSC	3	1	0	0	4
2	U21IT301	Computer Organization and Architecture	PCC	3	0	0	0	3
3	U21CS302	Operating Systems	PCC	3	0	0	0	3
4	U21CS303	Database Management Systems	PCC	3	0	0	0	3
THEORY COURSE WITH LABORATORY COMPONENT								
5	U21CS305	Data Structures	PCC	2	0	2	0	3
6	U21IT302	Frontend Development	PCC	3	0	2	0	4
7	-	NCC Credit Course Level 3*	-	1	0	2	0	2
LABORATORY COURSES								
8	U21CS306	Database Management Laboratory	PCC	0	0	2	4	2
MANDATORY NON CREDIT COURSES								
9	U21MYC03	Essence of Indian Traditional Knowledge	MNC	1	0	0	0	0
TOTAL				17	1	8	4	22

SEMESTER IV

SI.NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	J	C
THEORY COURSES								
1	U21MA401	Probability and Queuing Theory	BSC	3	1	0	0	4
2	U21IT401	Computer Networks	PCC	3	0	0	0	3
3	U21ITX##	Open Elective – I	OEC	3	0	0	0	3

THEORY COURSE WITH LABORATORY COMPONENT								
4	U21CS405	Microcontroller and Interfacing	ESC	3	0	2	0	4
5	U21IT402	Object oriented Programming with Java	PCC	3	0	2	0	4
6	U21IT403	Object Oriented Analysis and Design	PCC	3	0	0	4	4
7	-	NCC Credit Course Level 4*	-	2	0	2	0	
LABORATORY COURSES								
8	U21SS401	Soft Skills – I	HSMC	0	0	2	0	1
MANDATORY NON CREDIT COURSES								
9	U21MYC04	Indian Constitution	MNC	1	0	0	0	0
TOTAL				18	1	8	4	23

SEMESTER V

SI.NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	J	C
THEORY COURSES								
1	U21MA501	Discrete Mathematics	BSC	3	0	0	0	3
2	U21IT501	Software Engineering	PCC	3	0	0	0	3
3	U21ITP##	Professional Elective - I	PEC	3	0	0	0	3
4	U21ITP##	Professional Elective - II	PEC	3	0	0	0	3
5	U21ITX##	Open Elective - II	OEC	3	0	0	0	3
THEORY COURSE WITH LABORATORY COMPONENT								
6	U21CS503	Internet of Things	PCC	2	0	2	0	3
7	U21IT502	Mobile Application Development Laboratory	PCC	3	0	0	4	4
8		NCC Credit Course Level 5*	-	1	0	2	0	2
LABORATORY COURSES								
9	U21SS501	Soft Skills - II	HSMC	0	0	2	0	1
10	U21CS503	Software Engineering Lab	PCC	0	0	2	4	2
TOTAL				19	0	10	8	25

SEMESTER VI

SI.NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	J	C
THEORY COURSES								
1	U21IT601	Full stack Development	HSMC	3	0	0	0	3
2	U21IT602	Automata Theory and Compiler Design	PCC	3	1	0	0	4
3	U21CS603	Data Science	PCC	3	0	0	0	3
4	U21ITP##	Professional Elective – III	PEC	3	0	0	0	3
5	U21ITP##	Professional Elective - IV	PEC	3	0	0	0	3
6	U21ITX##	Open Elective - III	OEC	3	0	0	0	3
THEORY COURSE WITH LABORATORY COMPONENT								
7	U21IT603	Machine Learning	PCC	2	0	2	0	3
8	-	NCC Credit Course Level 6*	-	2	0	2	0	2
LABORATORY COURSES								
9	U21SS601	Soft Skills - III	HSMC	0	0	2	0	1
10	U21CS605	Data Science Laboratory	PCC	0	0	2	4	2
TOTAL				20	1	10	0	25

SEMESTER VII

SI.NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	J	C
THEORY COURSES								
1	U21IT701	Software Testing	HSMC	3	0	0	0	3
2	U21IT702	Cloud Computing	PCC	3	0	0	0	3
3	U21ITP##	Professional Elective – V	PEC	3	0	0	0	3
4	U21ITP##	Professional Elective - VI	PEC	3	0	0	0	3
5	U21ITX##	Open Elective - IV	OEC	3	0	0	0	3
LABORATORY COURSES								
6	U21IT703	Cloud computing Lab	PCC	0	0	4	2	2
7	U21IT704	Project work Phase - I	EEC	0	0	0	8	2
TOTAL				15	0	4	10	19

SEMESTER VIII

SI.NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	J	C
1	U21IT801	Project work Phase - II	EEC	0	0	0	40	10
TOTAL				0	0	0	40	10

SI.NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	J	C
1	U21IT101	Industrial Training / Internship **	EEC	0	0	0	0	2
TOTAL				0	0	0	0	2

***NCC Credit Course (Level 1 – Level 6) are offered for NCC students only. The grades earned by the students will be recorded in the mark sheet, however the same shall not be considered for the computation of CGPA.**

****Four Weeks during any semester vacation from III to VI Semester**

TOTAL CREDITS: 165