IT - COURSE STRUCTURE R - 2019

FIRST YEAR SEMESTER – I

Code	Course	Category	L	T	P	E	O	Total	Sessional Marks	External Marks	Total Marks	Credits
IT111	Engineering Mathematics – I	BS	3	0	0	1	6	10	40	60	100	3
IT112	Communicative English	HS	3	0	0	1	2	6	40	60	100	3
IT113	Basic Electronics Engineering	ES	3	0	0	1	6	10	40	60	100	3
IT114	Fundamentals of Information Technology	ES	3	0	0	1	2	6	40	60	100	3
IT115	Problem Solving with C	ES	3	0	0	1	6	10	40	60	100	3
IT116	English Language Laboratory	HS	0	0	3	0	1	4	50	50	100	1.5
IT117	Problem Solving with C Lab	ES	0	0	3	0	3	6	50	50	100	1.5
IT118	Environmental studies (Mandatory non-credit course)	MC	3	0	0	0	1	4	50	-	50	-
TOTAL			18	0	6	5	27	56	350	400	750	18

FIRST YEAR SEMESTER – II

Code	Course	Category	L	T	P	E	O	Total	Sessional Marks	External Marks	Total Marks	Credits
IT121	Engineering Mathematics –II	BS	3	0	0	1	6	10	40	60	100	3
IT122	Engineering Physics	BS	3	0	0	1	4	8	40	60	100	3
IT123	Engineering Chemistry	BS	3	0	0	1	4	8	40	60	100	3
IT124	Digital Logic Design	ES	3	0	0	1	6	10	40	60	100	3
IT125	Engineering Drawing	ES	2	0	3	1	4	10	40	60	100	3.5
IT126	Engineering Physics Lab.	BS	0	0	3	0	1	4	50	50	100	1.5
IT127	Engineering Chemistry Lab.	BS	0	0	3	0	1	4	50	50	100	1.5
IT128	Engineering Workshop	ES	0	0	3	0	1	4	50	50	100	1.5
IT129	Human Values and Professional Ethics(Mandatory non-credit course)	HS	3	0	0	0	1	4	50	0	50	-
TOTAL			17	0	12	5	28	62	400	450	850	20

SECOND YEAR SEMESTER – I

Code	Course	Category	L	T	P	E	O	Total	Sessional Marks	External Marks	Total Marks	Credits
IT211	Data Structures	PC	2	1	0	1	4	8	40	60	100	3
IT212	Basics of Electrical Engineering	ES	3	0	0	1	4	8	40	60	100	3
IT213	Discrete Mathematical Structures	BS	3	0	0	1	5	9	40	60	100	3
IT214	Computer Organization	PC	2	1	0	1	3	7	40	60	100	3
IT215	Microprocessors	PC	2	1	0	1	2	6	40	60	100	3
IT216	Data Structures Lab	PC	0	0	3	0	3	6	50	50	100	1.5
IT217	Microprocessor Lab	PC	0	0	3	0	3	6	50	50	100	1.5
IT218	Python Programming Lab	SC	0	1	3	0	1	5	50	50	100	2.5
TOTAL			12	4	9	5	25	55	350	450	800	20.5

SECOND YEAR SEMESTER – II

Code	Course	Category	L	T	P	E	O	Total	Sessional Marks	External Marks	Total Marks	Credits
IT221	Operating Systems	PC	2	1	0	1	3	7	40	60	100	3
IT222	Probability Statistics & Queuing Theory	BS	3	0	0	1	6	10	40	60	100	3
IT223	Data Communications	PC	3	0	0	1	2	6	40	60	100	3
IT224	Database Management Systems	PC	2	1	0	1	3	7	40	60	100	3
IT225	Object Oriented Programming using JAVA	PC	3	0	0	1	4	8	40	60	100	3
IT226	Object Oriented Programming using JAVA Lab	SC	0	0	3	0	3	6	50	50	100	1.5
IT227	Operating Systems Lab	PC	0	0	3	0	3	6	50	50	100	1.5
IT228	Database Management Systems Lab	PC	0	0	3	0	3	6	50	50	100	1.5
TOTAL			13	2	9	5	27	56	350	450	800	19.5

THIRD YEAR SEMESTER – I

Code	Course	Category	L	T	P	E	O	Total	Sessional Marks	External Marks	Total Marks	Credits
IT311	Open Elective-1	OE	3	0	0	1	2	**6**	40	60	100	3
IT312	Computer Networks	PC	3	0	0	1	2	**6**	40	60	100	3
IT313	Automata theory and compiler design	PC	3	1	0	1	3	**8**	40	60	100	3
IT314	Professional Elective-I	PE	3	0	0	1	2	**6**	40	60	100	3
IT315	Artificial Intelligence	PC	2	1	0	1	3	**7**	40	60	100	3
IT316	QA-1 & VA-1	HS	0	0	3	1	3	**7**	100	-	100	1.5
IT317	UML & Testing Lab	PC	0	0	3	0	0	**3**	50	50	100	3
IT318	Computer Networks lab	SC	0	0	3	0	1	**4**	50	50	100	1.5
IT319	Web Technologies Lab	PC	0	1	3	0	3	**7**	50	50	100	2.5
IT320	Internship in Industry -I	PR	-	-	-	0	2	**2**	100	-	100	2
TOTAL			**14**	**3**	**12**	**6**	**21**	**56**	**550**	**450**	**1000**	**25**

THIRD YEAR SEMESTER – II

Code	Course	Category	L	T	P	E	O	Total	Sessional Marks	External Marks	Total Marks	Credits
IT321	Open Elective - 2	OE	3	0	0	1	2	6	40	60	100	3
IT322	Professional Elective - 2	PE	3	0	0	1	2	6	40	60	100	3
IT323	Professional Elective - 3	PE	3	0	0	1	2	6	40	60	100	3
IT324	Design and Analysis of Algorithms	PC	3	0	0	1	3	7	40	60	100	3
IT325	DesignThinking	HS	3	0	0	1	2	6	40	60	100	3
IT326	QA-2 & Soft Skills	HS	0	0	3	2	3	8	100		100	1.5
IT327	Elective Lab-I	SC	0	1	3	0	3	7	50	50	100	2.5
IT328	Internet of Things Lab	PC	0	1	3	0	3	7	50	50	100	2.5
IT329	Graphics and Multimedia Lab	PC	0	0	3	0	1	4	50	50	100	2
TOTAL			**15**	**2**	**12**	**7**	**21**	**57**	**450**	**450**	**900**	**23**

FOURTH YEAR SEMESTER – I

Code	Course	Category	L	T	P	E	O	Total	Sessional Marks	External Marks	Total Marks	Credits
IT411	Open Elective-3	OE	3	0	0	1	2	6	40	60	100	3
IT412	Professional Elective-4	PE	3	0	0	1	2	6	40	60	100	3
IT413	Professional Elective-5	PE	3	0	0	1	2	6	40	60	100	3
IT414	Cryptography & Network Security	PC	3	0	0	1	3	7	40	60	100	3
IT415	Foundation on Data Science	PC	2	1	0	1	2	6	40	60	100	3
IT416	Data Science Applications Lab	PC	0	0	3	0	3	6	50	50	100	1.5
IT417	Elective Lab-II	SC	0	1	3	0	3	7	50	50	100	2.5
IT418	Project Phase - I	PR	0	0	4	0	4	8	100		100	2
IT419	Internship Industry - II	PR	-	-	-	0	2	2	100	-	100	2
TOTAL			14	2	10	5	21	52	500	400	900	23
FOURTH YEAR SEMESTER – II												
Code	Course	Category	L	T	P	E	O	Total	Sessional Marks	External Marks	Total Marks	Credits
IT421	Open Elective-4	OE	3	0	0	1	2	6	40	60	100	3
IT422	Project Phase-II	PR	0	0	16	0	16	32	100	100	200	8
TOTAL			3	0	16	1	18	38	140	160	300	11
										TOTAL CREDITS		160