

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING										
COURSE STRUCTURE BOS 2020										
Programme -M. Tech in Information Technology (Data Analytics)										
I SEMESTER										
Sl. No	Course Code	Course Name	Hours			Total	Credits			Total
			L	T	P	Marks	L	T	P	Credits
THEORY										
1	MTCS131	Research Methodology and IPR	3	0	0	100	3	0	0	3
2	MTITDA131	Advances in Database Management systems	3	0	0	100	3	0	0	3
3	MTITDA132	Advanced Artificial Intelligence	3	0	0	100	3	0	0	3
4	MTITDA133	Advanced Data Mining	3	0	0	100	3	0	0	3
5	MTITDA134	Statistical Foundations for Data Science	3	0	0	100	3	0	0	3
6	HE171	Holistic Education-I	1	0	0	-	1	0	0	1
PRACTICAL										
7	MTITDA151	Advances in Database Management systems Lab	0	0	4	50	0	0	2	2
8	MTITDA152	Advanced Data Mining Lab	0	0	4	50	0	0	2	2
9	MTCS111	Audit Course -1	2	0	0	-	0	0	0	0
10	MTCS112	Professional Practice-I	0	0	2	50	0	0	1	1
TOTAL			18	0	10	650	16	0	5	21

II SEMESTER

Sl. No	Course Code	Course Name	Hours			Total	Credits			Total
			L	T	P	Marks	L	T	P	Credits
THEORY										
1	MTITDA231	Big data Analytics	3	0	0	100	3	0	0	3
2	MTITDA232	Machine Learning	3	0	0	100	3	0	0	3
3	MTITDA241	Elective - I	3	0	0	100	3	0	0	3
4	MTITDA242	Elective - II	3	0	0	100	3	0	0	3
5	HE271	Holistic Education-II	1	0	0	-	1	0	0	1
PRACTICAL										
6	MTITDA251	Big data Analytics Lab	0	0	4	50	0	0	2	2
7	MTITDA252	Machine Learning Lab	0	0	4	50	0	0	2	2
8	MTCS212	Audit Course-2	2	0	0	-	0	0	0	0
9	MTCS213	Professional Practice-II	0	0	2	50	0	0	1	1
		TOTAL	15	0	10	550	13	0	5	18

MTITDA241- ELECTIVE - I										
1	MTITDA241E01	Advanced Digital Image Processing	3	0	0	100	3	0	0	3
2	MTITDA241E02	Data Visualization Techniques	3	0	0	100	3	0	0	3
3	MTITDA241E03	Advanced Soft Computing	3	0	0	100	3	0	0	3
4	MTITDA241E04	Social and web media Analytics	3	0	0	100	3	0	0	3
5	MTITDA241E05	Massive graph analysis	3	0	0	100	3	0	0	3
MTITDA242- ELECTIVE - II										
1	MTITDA242E01	Internet of Things	3	0	0	100	3	0	0	3
2	MTITDA242E02	Deep and Reinforcement Techniques	3	0	0	100	3	0	0	3
3	MTITDA242E03	Predictive analytics	3	0	0	100	3	0	0	3
4	MTITDA242E04	Pattern Recognition	3	0	0	100	3	0	0	3

5	MTITDA242E05	Optimization Techniques	3	0	0	100	3	0	0	3
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MTCS111- AUDIT COURSE -1										
1	MTCS111E01	English for Research Paper Writing	2	0	0	-	0	0	0	0
2	MTCS111E02	Disaster Management	2	0	0	-	0	0	0	0
3	MTCS111E03	Sanskrit for Technical Knowledge	2	0	0	-	0	0	0	0
4	MTCS111E04	Value Education	2	0	0	-	0	0	0	0
MTCS212- AUDIT COURSE -2										
1	MTCS212E01	Constitution of India	2	0	0	-	0	0	0	0
2	MTCS212E02	Pedagogy Studies	2	0	0	-	0	0	0	0
3	MTCS212E03	Stress Management by Yoga	2	0	0	-	0	0	0	0
4	MTCS212E04	Personality Development through Life Enlightenment Skills.	2	0	0	-	0	0	0	0

III SEMESTER										
Sl. No	Course Code	Course Name	Hours			Total	Credits			Total
			L	T	P	Marks	L	T	P	Credits
1	MTITDA343	Elective - III	3	0	0	100	3	0	0	3
2	MTCS361	Elective - IV(Global)	3	0	0	100	3	0	0	3
3	MTCS381	Internship	0	0	4	-	0	0	2	2
4	MTCS382	Dissertation Phase -I	0	0	20	200	0	0	10	10
Total			6	0	24	400	6	0	12	18

IV SEMESTER										
Sl. No	Course Code	Course Name	Hours			Total	Credits			Total
			L	T	P	Marks	L	T	P	Credits
1	MTCS483	Dissertation Phase - II	0	0	32	200	0	0	16	16
Total					32	200	0	0	16	16

MTITDA343- ELECTIVE - III										
1	MTITDA343E01	Real Time Data Analytics	3	0	0	100	3	0	0	3
2	MTITDA343E02	Big Data Analytics for IoT	3	0	0	100	3	0	0	3
3	MTITDA343E03	Natural Language Processing	3	0	0	100	3	0	0	3
4	MTITDA343E04	Image and Video Analytics	3	0	0	100	3	0	0	3
5	MTITDA343E05	Scientific Computing	3	0	0	100	3	0	0	3
6	MTITDA343E06	Matrix Computations	3	0	0	100	3	0	0	3
7	MTITDA343E07	NoSql Database	3	0	0	100	3	0	0	3

MTCS361-ELECTIVE - IV(Global)										
1	MTCS361E01	Internet Of Things	3	0	0	100	3	0	0	3
2	MTCS361E02	Machine Learning	3	0	0	100	3	0	0	3
3	MTCS361E03	Mobile application Development	3	0	0	100	3	0	0	3
4	MTCS361E04	Introduction to Data Science	3	0	0	100	3	0	0	3
5	MTCS361E05	Business Analytics	3	0	0	100	3	0	0	3