BIRLA INSTITUTE OF TECHNOLOGY- MESRA, RANCHI

NEWCOURSE STRUCTURE - *To be effective from academic session 2018- 19*

Based on CBCS & OBE model

Recommended scheme of study for MCA Programme

SEMESTER / Session of Study (Recomended)	Course Level	Category of Course	Course Code	Courses	Mode of delivery & credits *L-Lecture; T-Tutorial;P-Practicals*			Total Credits *C- Credits*
					L (*Periods/week*)	**T (*Periods/week*)**	**P (*Periods/week*)**	**C**
THEORY								
FIRST / Monsoon	**FOURTH**	Fundamental Science (FS)	MA430	Discrete Mathematical Structure	3	0	0	3
			MA428	Numerical and Statistical Methods	3	0	0	3
	FIRST	Humanities & Social Sciences (HSS)	MT123	Business Communication	2	0	2	3
			MT114	Fundamentals of management & Organization Behaviour	3	0	0	3
	FOURTH	Programme Core (PC)	CA401	Programming with C	3	0	0	3
			CA403	Computer Organization and Architecture	3	0	0	3
		LABORATORIES						
	FOURTH	Programme Core (PC)	CA402	Programming Lab in C	0	0	3	1.5
			MA429	Numerical and Statistical Methods Lab	0	0	3	1.5
		TOTAL						**21**
THEORY								
SECOND/ Spring	**FOURTH**	Fundamental Science (FS)	CA455	Fundamentals of Data Structures	3	1	0	4
	FIRST		BT417	Bioinformatics	3	0	0	3
	FOURTH	Programme Core (PC)	CA457	Operating System	3	0	0	3
			CA459	Object Oriented Design and Programming	3	0	0	3
			CA461	Database Management Systems	3	1	0	4
	FIRST	HSS	MT117	Basics of Financial Accounting Management	3	0	0	3
		LABORATORIES						
	FOURTH	Programme Core (PC)	CA456	Data Structure Lab	0	0	3	1.5
			CA458	Operating Systems Lab	0	0	3	1.5
			CA460	C++ Programming Lab	0	0	3	1.5
			CA412	RDBMS Lab	0	0	3	1.5
		TOTAL						**26**
THEORY								
THIRD/ Monsoon	**FIFTH**	Programme Core (PC)	CA501	Java Programming	3	0	0	3
			CA503	Computer Algorithm Design	3	1	0	4
			CA504	Automata Theory	3	1	0	4
			CA505	Software Engineering	3	1	0	4
	FIRST	HSS	MT121	Corporate Social Responsibility	2	0	0	2
		Programme Elective (PE)		Programme Elective-I	3	0	0	3
				Programme Elective-I	3	0	0	3
		LABORATORIES						
	FIFTH	Programme Core (PC)	CA502	Java Programming Lab	0	0	3	1.5
			CA506	Software Engineering Lab	0	0	3	1.5

		TOTAL						**26**
THEORY								
FOURTH/Spring	**FIFTH**	Programme Core (PC)	CA557	Front end Design	3	1	0	4
			CA559	Data Communication and Computer Network	3	1	0	4
			CA561	Software Project Management	3	0	0	3
		Programme Elective(PE)		Programme Elective- II	3	0	0	3
				Programme Elective- II	3	0	0	3
		MOOC		Massive Online Courses and Assignments	4	0	0	4
		LABORATORIES						
	FIFTH	Programme Core (PC)	CA558	Front end Design Lab	0	0	3	1.5
			CA560	Data Communication and Computer Networks Lab	0	0	3	1.5
		TOTAL						**24**
THEORY								
FIFTH/Monsoon	**FIEST**	Humanities & Social Sciences (HSS)	MT116	Quantitative methods for Business Decision	3	0	0	3
	SIXTH	Programme Core (PC)	CA601	Computer Graphics	3	0	0	3
			CA603	System Simulation and Modeling	3	0	0	3
			CA605	Optimization Techniques	3	0	0	3
		Programme Elective(PE)		Programme Elective-III	3	0	0	3
				Programme Elective-IV	3	1	0	4
		SIT / Soft Skill Course / Extra OE		Small Industrial Training/ Small Project /	0	0	6	6
		LABORATORIES						
	SIXTH	Programme Core (PC)	CA602	Computer Graphics Lab	0	0	3	1.5
			CA604	System Simulation and Modeling Lab	0	0	3	1.5
		TOTAL						**28**
PROJECT								
SIXTH/ Spring	**SIXTH**	Project(P)	CA656	Project				**15**
TOTAL								**15**
GRAND TOTAL								**140**