BIRLA INSTITUTE OF TECHNOLOGY- MESRA, RANCHI
NEWCOURSE STRUCTURE - *To be effective from academic session 2021-22*
Based on CBCS system & OBE model

M. TECH. REMOTE SENSING

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	Fifth	Programme Core (PC)	RS 501R1	Principles of Remote Sensing and Digital Satellite Image Processing	3	1	0	4
			RS 502R1	Geographic Information System and Satellite Navigation System	3	1	0	4
		Programme Elective (PE)	RS *	**ELECTIVE I**	3	0	0	3
			RS *	**ELECTIVE I LAB**	0	0	4	2
				LABORATORIES				
	Fifth	Programme Core (PC)	RS 503	Remote Sensing and Digital Satellite Image Processing Laboratory	0	0	4	2
			RS 504	Geographic Information System&Satellite Navigation SystemLaboratory	0	0	4	2
			RS 515	Programming and Customisation in geospatial domain Laboratory	0	0	2	2
				TOTAL				19
SECOND/ Spring	Fifth	Programme Core (PC)	RS 511	Aerial and Satellite Photogrammetry & Image Interpretation	3	0	0	3
			RS 512	Advanced Remote Sensing and Geospatial Modelling	3	1	0	4
			RS 521	Data Sources, Statistics and Research Methods in Geospatial	3	0	0	3
		Programme Elective (PE)	RS *	**ELECTIVE II**	3	0	0	3
			RS *	**ELECTIVE II LAB**	0	0	4	2
				LABORATORIES				
	Fifth	Programme Core (PC)	RS 513	Aerial and Satellite Photogrammetry & Image Interpretation Laboratory	0	0	4	2
			RS 514	Geospatial Modelling Laboratory	0	0	4	2
				TOTAL				19
THIRD / Monsoon	Sixth	Programme Core (PC)	RS 601	**Thesis (Part I)**				8
		Open Elective (OE)		**OE I / MOOC**	3	0	0	3
				OE II / MOOC	3	0	0	3
				TOTAL				14
FOURTH/ Spring	Sixth	Programme Core (PC)	RS 604	**Thesis (Part II)**				16
				TOTAL				16
				GRAND TOTAL FOR M.TECH PROGRAMME (38 + 30)				68

Elective 1 (Candidate need to take One theory +associated laboratory from Group 1)
GROUP 1

RS 505	Remote Sensing in Agriculture & Forestry
RS 506	Remote Sensing in Disaster Management
RS 507	Remote Sensing in Hydrology & Water Resources
RS 508	Remote Sensing in Agriculture & Forestry Laboratory
RS 509	Remote Sensing in Disaster Management Laboratory
RS 510	Remote Sensing in Hydrology & Water Resources Laboratory

$$ Elective 2 (Candidate need to take One theory +associated laboratory from Group 2)
GROUP 2

RS 516	Remote Sensing in Snow and Glacier Hydrology
RS 517	Remote Sensing in Climate Change and Environmental Impact Assessment
RS 518	Remote Sensing in Snow and Glacier Hydrology Laboratory
RS 519	Remote Sensing in Climate Change and Environmental Impact Assessment Labora

Open Elective refers to subjects hosted by other Departments, and student need to take a subject (having appropriate credit) of their own choice.