

**BIRLA INSTITUTE OF TECHNOLOGY- MESRA, RANCHI**  
**NEWCOURSE STRUCTURE - To be effective from academic session 2022- 23**  
*Based on CBCS system & OBE model*

**M. TECH. (REMOTE SENSING) - SPECIALISATIONS I. EARTH RESOURCES II. ENVIRONMENT & CLIMATE**

Semester / Session of Study (Recommended)	Course Level	Category of course	Course Code	Courses	Mode of delivery & credits <i>L-Lecture; T-Tutorial;P-Practicals</i>			Total Credits <i>C- Credits</i>		
					L <i>(Periods/week)</i>	T <i>(Periods/week)</i>	P <i>(Periods/week)</i>	C		
FIRST / Monsoon	FIFTH	<b>THEORY</b>								
		Programme Core (PC)	RS 501	Principles of Remote Sensing and Digital Satellite Image Processing	3	0	0	3		
			RS 502R2	Geographic Information System and Satellite Navigation System	3	0	0	3		
			RS 511	Aerial and Satellite Photogrammetry & Image Interpretation Laboratory	3	0	0	3		
	Programme Elective (PE)	RS * ##	ELECTIVE - I	3	0	0	3			
	FIFTH	<b>LABORATORIES</b>								
		Programme Core (PC)	RS 503	Remote Sensing and Digital Satellite Image Processing Laboratory	0	0	4	2		
			RS 504	Geographic Information System & Satellite Navigation System Laboratory	0	0	4	2		
			RS 513	Aerial and Satellite Photogrammetry & Image Interpretation Laboratory	0	0	4	2		
			MT 132	Communication Skills I	0	0	3	1.5		
		Programme Elective (PE)	RS * ##	ELECTIVE - I Laboratory	0	0	4	2		
		<b>TOTAL</b>							<b>21.5</b>	
		SECOND/ Spring (Specialisation EARTH RESOURCES)	FIFTH	<b>THEORY</b>						
	Programme Core (PC)			RS 512	Advanced Remote Sensing and Geospatial Modelling	3	0	0	3	
RS 521				Data Sources, Statistics and Research Methods in Geospatial Domain	3	0	0	3		
RS 522				Programming concepts for spatial data handling	3	0	0	3		
Programme Elective (PE)	RS * \$\$			ELECTIVE - II	3	0	0	3		
<b>LABORATORIES</b>										
Programme Core (PC)	RS 514		Advanced Remote Sensing and Geospatial Modelling Laboratory	0	0	4	2			
	RS 515R1		Programming and Customisation in geospatial domain Laboratory	0	0	4	2			
	MT 133		Communication Skills II	0	0	3	1.5			
Programme Elective (PE)	RS * \$\$		ELECTIVE - II Laboratory	0	0	4	2			
<b>TOTAL (EARTH RESOURCES)</b>							<b>19.5</b>			
SECOND/ Spring (Specialisation ENVIRONMENT & CLIMATE)	FIFTH	<b>THEORY</b>								
		Programme Core (PC)	RS 523	Physical Meteorology	3	0	0	3		
			RS 521	Data Sources, Statistics and Research Methods in Geospatial Domain	3	0	0	3		
			RS 522	Programming concepts for spatial data handling	3	0	0	3		
		Programme Elective (PE)	RS * \$\$	ELECTIVE - II	3	0	0	3		
		<b>LABORATORIES</b>								
	Programme Core (PC)	RS 525	Meteorological Laboratory	0	0	4	2			
		RS 515R1	Programming and Customisation in geospatial domain Laboratory	0	0	4	2			
		MT 133	Communication Skills II	0	0	3	1.5			
	Programme Elective (PE)	RS * \$\$	ELECTIVE - II Laboratory	0	0	4	2			
<b>TOTAL (ENVIRONMENT &amp; CLIMATE)</b>							<b>19.5</b>			
THIRD / Monsoon	SIXTH	Programme Core (PC)	RS 601	Thesis (Part – I)				8		
		Open Elective (OE)		OPEN ELECTIVE / MOOC	3	0	0	3		
			OPEN ELECTIVE / MOOC	3	0	0	3			
	<b>TOTAL</b>							<b>14</b>		
FOURTH/ Spring	SIXTH	Programme Core (PC)	RS 604	Thesis (Part – II)				16		
<b>TOTAL</b>							<b>16</b>			
<b>SIXTH LEVEL TOTAL</b>							<b>30</b>			
<b>GRAND TOTAL FOR M.TECH PROGRAMME (41 + 30)</b>							<b>71</b>			