## MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB

Syllabus of M. Tech. in Geoinformatics (Effective for 2019-2020 Admission session)

## **Course Content**

## First Year

First Semester	
Theory	Lab
DGI-101.Principles of Remote Sensing and	DGI-191. Remote Sensing and
Photogrammetry(Credit:3)	Photogrammetry Lab(Credit:2)
DGI-102.Principles of Geographic Information	DGI-192. GIS Lab(Credit:2)
Systems (GIS) (Credit:3)	
DGI-103.Basics of GNSS, Cartography & Digital	DGI-193. GNSS and Cartography
Mapping(Credit:3)	Lab(Credit:2)
DGI-104. Mathematical Methods and Scientific	DGI-194. Web Technology
Computing for Geospatial Data Analysis(Credit:3)	Lab(Credit:2)
DGI-105. Recent Trends in Geo-informatics:	DGI-195. Programming in
Machine Learning and Big Data(Credit:3)	Python(Credit:2)
Second Semester	
Theory	Lab
DGI-201. Spatial Database, Analysis and Modeling	DGI-291 Database Analysis and
and Satellite Image Processing(Credit:3)	SIP Lab (Credit:2)
DGI-202. Elective I & II (any two of the following)	DGI-292. (Credit:2)
(Credit:3)	A. Application of Geoinformatics
	Lab
A. Applications of Geoinformatics	B. Disaster Management Lab
B. Disaster Management	C. Geoinformatics in Engineering
C. Geoinformatics in Engineering Projects	Projects
D. Geoinformatics in Water Resources Management	D. Geoinformatics in Water
	Resources Management Lab
DGI-293. Grand Viva (Credit:3)	
DGI-294 Project Work (Credit:3)	

## **Second Year**

Third Semester		
Theory	Lab	
DGI-301. WebGIS, Geospatial Cloud Computing	DGI-391. WebGIS Lab(Credit:2)	
(Client Server Architecture) (Credit:3)		
DGI-302. Machine Learning in	DGI-392. Machine Learning in	
Geoinformatics(Credit:3)	Geoinformatics Lab(Credit:2)	
DGI-303. Elective III (any one) (Credit:3)	DGI-393. (Credit:2)	
i. Recent Trends in Geoinformatics (Big Data,	A. Recent Trends in Geoinformatics	
Data Mining etc.)	Lab	
ii. Spatial Data Warehousing and Mining and	B Spatial Data Warehousing and	
Spatial Decision Support System	Mining and Spatial Decision Support	
	System Lab	
DGI-394. Case Study based Mini Project . M. Tech. Dissertation I(Credit:10)		
Fourth Semester		
<b>491.</b> M. Tech. Dissertation II (Credit:16)		