

## MS DS (Geospatial Data Science)

Customized Non-Credit Courses		
Course Code	Course Title	Credit Hours
CT-492	Object Oriented Programming.	0
CT-493	Data Structure and Algorithm Design.	0
CT-494	Introduction to Databases.	0
CT-494	Fundamentals of Remote Sensing and GIS	0
Note: For those candidates who have qualifications other than BS (CSIT) or equivalent, a departmental admission committee shall decide on the number and the particular deficiency courses (non-credit) which a candidate shall have to take based on his/her previous qualification		

Compulsory Courses		
Course Code	Course Title	Credit Hours
CT-530	Data Mining.	3
CT-562	Machine Learning .	3
CT-581	Statistics & Probability for Data Science.	3
CT-583	Tools and Techniques for Data Science.	3
CT-5003	Advanced Principles of Geoinformatics	3

Elective Courses		
Course Code	Course Title	Credit Hours
CT-527	Image Processing and Computer Vision.	3
CT-590	Data Visualization.	3
CT-5004	Advanced Programming in GIS	3
CT-5005	Spatial Decision Support Systems	3
CT-5007	Web GIS	3
CT-5008	Spatial Analytics	3
CT-5009	Spatial Databases and Data Interoperability	3
CT-5010	GIS for Infrastructure Management	3
CT-5011	GIS for Emergency Management	3
CT-5012	Emerging Trends in Remote Sensing & GIS	3
CT-5002	Thesis	6