

Course Title: Spatial Data Modelling and Analysis			
Course code: UES 210	No. of credits: 3	L-T-P: 34-0-22	Learning hours: 45
L: Lecture; T: Tutorial; P: Practical			
Pre-requisite course code and title (if any):			
Department: Department of Natural and Applied Sciences			
Course coordinator:		Course instructor:	
Contact details:			
Course type: Minor		Course offered in: Semester 4	
Course Description This course is designed to equip students with the theoretical knowledge and practical skills needed to effectively manage, analyze, and visualize spatial data in various contexts. This course delves into the principles and methodologies of spatial data analysis, emphasizing the importance of geographic information systems (GIS), remote sensing, and statistical techniques in understanding spatial phenomena. Upon successful completion of the course, the students will be able to apply a range of statistical and geospatial analysis methods, such as spatial autocorrelation, interpolation, and surface analysis, to uncover patterns and relationships within spatial datasets.			
Course objectives <ul style="list-style-type: none"> • Develop an understanding of fundamental spatial concepts, terminology, and theories that underpin spatial data modeling and analysis. • Develop skills in applying spatial analysis methods such as interpolation, and spatial statistics to identify patterns and relationships within spatial datasets. • Develop proficiency in visualizing spatial data using maps and graphs, emphasizing the importance of effective communication of spatial information to diverse audiences. 			