

<b>Course title:</b> Spatial Data Modeling and Applications			
<b>Coursecode:</b> NRG163	<b>No. of credits:</b> 4	<b>L-T-P:</b> 36-08-32	<b>Learning hours:</b> 60
<b>Pre-requisite course code and title(if any):</b> NRG176 Principles of GIS and GNSS			
<b>Department :</b> Department of Natural and Applied Sciences			
<b>Course coordinator :</b> Dr.Ayushi Vijhani		<b>Course instructor :</b> Dr.Ayushi Vijhani	
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<b>Course type:</b> Core		<b>Course offered in:</b> Semester 2	
<p><b>Course Description</b></p> <p>The course covers fundamental aspects of spatial data modeling specifically to enhance the capability of spatial modelling, spatial data base analysis concept, design and format under different natural resource assessment planning and monitoring.It introduces the participant to the basic concepts of Matrix &amp; PCA, map algebra,decision making criteria, spatial analysis of discrete and continuous datasets, geo-statistics,decision-making,conflict resolution. It also considers integration of nonspatial data and application developed based on the concepts by software developers, photo grammetrists, land surveyors, mapping specialists, researchers, post-graduate students, and lecturers.</p>			
<p><b>Course objectives</b></p> <ol style="list-style-type: none"> <li>1. To introduce fundamental aspects of spatial data modeling.</li> <li>2. To understand the natural and social resource assessment, planning and monitoring for National development process.</li> <li>3. To create a firm basis for successful integration of natural / human resources using spatial modeling in any field of application.</li> </ol>			