

A glowing lightbulb hangs from a black cord, positioned over a view of Earth from space. The Earth shows the Middle East, Africa, and parts of Europe and Asia. The background is a dark starry space.

**Add on Course**

**on**

**Geospatial  
Technology**

**From**

**November, 2022 to February, 2023**

**Organized By**

**Department of Geography  
Mangaldai College , Mangaldai  
Darrang, Assam**

**For more detail contact +91 91015 90613**

**ADD ON COURSE ON GEO-SPATIAL TECHNOLOGY AND ITS APPLICATION IN VARIOUS FIELDS.**

ORGANIZED BY: DEPARTMENT OF GEOGRAPHY,  
MANGALDAI COLLEGE

**DURATION: THREE MONTHS**  
16<sup>TH</sup> NOVEMBER, 2022 TO 16<sup>TH</sup> FEBRUARY, 2023

**SYLLABUS OF THE COURSE:**

<b><u>MODULE I</u></b> Concept of Geo-spatial Technology: Basics of Remote Sensing, Geographical Information System and Global Positioning System.	<b><u>MODULE II</u></b> Concept of Remote Sensing, Principles of Remote Sensing, Components of Remote Sensing, Types of Remote Sensing, Satellite Remote Sensing, Sensors and platforms, visual and digital image processing	<b><u>MODULE III</u></b> Introduction to GIS, Basic principles of GIS, Components of GIS, Concept of Data, GIS Data Types, Spatial data analysis, Digital Cartography and Fundamentals Global Positioning System. Open Source GIS.
<b><u>MODULE IV</u></b> Concept of GPS, Components of GPS, GPS types, Working principle of GPS.	<b><u>MODULE V: Practical</u></b> Geo-referencing, Radiometric corrections, Spectral and spatial enhancement of satellite image, Supervised and unsupervised classification, Accuracy assessment.	<b><u>MODULE VI: Practical</u></b> Digital cartography; GIS data types: raster and vector preparation; Digitization of vector data; Attribute editing, Map composition. Global Positioning System: Use of handheld GPS, GPS data collection and processing.
<b><u>MODULE VII</u></b> Application of Geo-spatial Technology in various fields. <ul style="list-style-type: none"><li>• Forest Management</li><li>• Biodiversity Conservation.</li><li>• Land use planning.</li><li>• Wildlife habitat management and conservation</li><li>• Urban environmental management.</li><li>• Landscape ecological studies, etc.</li></ul>	<b>STUDENTS WILL GET EXPOSURE TO REMOTE SENSING AND GIS SOFTWARES.</b> <ul style="list-style-type: none"><li>• QGIS</li><li>• ERDAS</li><li>• ILWIS</li><li>• ARC GIS</li><li>• GOOGLE EARTH PRO</li><li>• EASY GPS</li><li>• GPS ESSENTIAL</li><li>• DNR GARMIN</li></ul>	

**COURSE FEES: Rs. 300/- (THREE HUNDRED ONLY) FOR MANGALDAI COLLEGE STUDENTS**