

Department : Civil

Year : 2014-2015

Group No: 13

Guided By

**PROF. SUMANTA  
DAS/PROF. MALINI  
ROY CHOUDHURY**

## **SMT. S. R. PATEL ENGINEERING COLLEGE, UNJHA**

### **Project Title**

### **“MONITORING AND ASSESSMENT OF LAND USE & LAND COVER CHANGES THROUGH GEO-SPATIAL TECHNIQUES”**

#### **Abstract:**

Remote Sensing and GIS is a fundamental and essential tool, widely applicable for investigating the LULC at the village as well as the regional levels. This paper shows a Geographical Information Systems & Science (GISc) approach for modeling land use and land cover change (LUCC) in a rapid urban growing region of Guwahati city, Assam. In this project, we used multi-temporal satellite images (IRS LISS-III) for the years of 2006 and 2010 and topographical map as raw data source for monitoring and assessment of land use and land cover changes. The supervised classification of both the satellite images and analytical works are carried out in ERDAS IMAGINE 9.2 and ARC GIS 9.3 softwares. LU/LC classification of temporal satellite images represent the overall change scenario of the several years and the approach of change matrix analysis is determined the overall reduction and increment of LU/LC areas. The result demonstrated that, the overall boundary area of Guwahati city has been decreased from 2006 to 2010. In that, Scrub land and Population increased rapidly, whereas, Dense vegetation class is decreased due to rapid urbanization which leads to environmental degradation.

#### **Prepared By:**

<b>Sr. No.</b>	<b>Student Name</b>	<b>Enrollment No</b>
1	PATEL KRUNAL A	120783106002
2	PATEL KARTIK I	120783106003
3	PATEL VIKAS J.	110780106059
4	MEWADA PARTH N.	100780106030

