JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA

KAKINADA – 533 003, Andhra Pradesh, India

DEPARTMENT OFCIVIL ENGINEERING

IV Year – I Semester		L	T	P	C
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	Remote Sensing & GIS Lab				

Learning Objectives:

The course is designed to

1. Understand the process Geo-referencing, Preparation of Base map from of Toposheet.
2. Digitization, creation of thematic maps from toposheets.
3. Developing Digital Elevation model
4. Interpretation and Estimation of features of Land Use/land cover details from satellite imagery.
5. Learn to apply GIS software to simple problems in water resources, transportation engineering and Agriculture

Outcomes

At the end of the course the student will be able to

a. Work comfortably on GIS software
b. Digitize and create thematic map and extract important features
c. Develop digital elevation model
d. Interpretation and Estimation of features from satellite imagery.
e. Analyze and Modelling using GIS software.

SYLLABUS:
GIS:
SOFTWARES:

1. Arc GIS 10.1
2. ERDAS Imagine 13
3. MapInfo 6.5
4. ILWIS or Any one or Equivalent.

EXCERCISES IN GIS:

1. Geo-referencing of Toposheet.

2. Preparation of Base map from topo sheet including legend, scale and annotation

3 Digitization of Map/Toposheet

4. Developing Digital Elevation model

5. Interpretation of Land Use/land cover detail from satellite imagery

6. Creation of thematic maps.

7. Estimation of features and interpretation

8. Simple applications of Remote Sensing & GIS in water Resources

9. Simple applications of Remote Sensing & GIS in Transportation

10. Simple applications of Remote Sensing & GIS in Agriculture

TEXT BOOK:

1. Concept and Techniques of GIS' by C.P.L.O. Albert, K.W. Yong, Printice Hall Publishers
2. Software Manuals.