Application of GIS in Hydrology

At the end of this course, students will be able to:

1) Explain what a GIS is, and to describe its key features

2) Use GIS to map and analyze data

3) Use GIS spatial analyst toolbox to work on real WRM problems

4) Understand important terminology in remote sensing

5) Explain the advantages and disadvantages of measurements in different parts of the EM spectrum

6) Use real remote sensing data to study problems in WRM

We shall look at:

Introduction to GIS

Spatial Analysis in GIS

Watershed Delineation

Introduction to Remote Sensing & Visible RS

Thermal IR Remote Sensing

Microwave Remote Sensing

At the end of the practical, students shall submit a project each