# **GEO-INFORMATION FOR EARTH SYSTEM SCIENCE**

Earth is a complex, dynamic system and is often represented by interlinking and interacting "spheres" of processes and phenomena. The air (atmosphere), water (hydrosphere), land (geosphere) and life (biosphere) form the simplest collection, though some would add the cryosphere as a special element dealing with Polar Regions and processes, and others would add the anthroposphere emphasizing human dimensions and impact on the planet. Geographic Information Systems (GIS) and Remote Sensing (RS) Techniques as an emerging technologies can be utilized to analyze, improve prediction and take mitigatory measures of phenomenon such as floods, droughts, wildfires earthquakes and tsunamis etc.

## **COURSE DETAILS**

**DURATION**: 20 Hours (Online: 12 hours | Virtual: 8 hours)

COURSE FEES: Rs. 35,000 only Includes study materials, meals and refreshments

**TIME**: 9. am to 4 pm

### **INQUIRIES:**

Information can be obtained from the Institute's website given below: http://www.accimt.ac.lk/

**CONTACT:** Mr. Mohomed Rila (Course Co-coordinator) Mobile –071-4441501



## **INTENDED AUDIENCE**

Academics, researchers, planners, geologists, engineers, geographers and surveyors, students

# **COURSE CONTENT**

### **COURSE CONTENT IN BRIEF:**

- Geo-information for earth system science Introductory Lecture
  - (Geo-information technologies, GNSS, GIS, Remote Sensing, Challenges)
- Geographical Information for earth system science

(Introduction, Definition and basic concepts, Applications and uses of Geographic Information Systems)

• Remote Sensing for Earth System Science

(Principles and basic skills in remote sensing image processing and analysistheory, methods, and applications of remote sensing)

• Advanced GIS for Remote Sensing for Geoscience Applications

(Research methods, techniques and Image interpretation to investigate problems in geoscience)

• Application Issues in Geo-Information Systems

(Data collection and data sharing issues, global players GEO and INSPIRE)

• Mini Project