

Continuing Education Programme
June 17-21, 2019

@Azim Premji University, PES Campus,
Hosur Road, Bangalore



Introduction to Mapping and Geographical Information Systems using Quantum GIS

Five days course for development, conservation and education practitioners

Apply by
May 19
2019

Why this course?

In recent years, geographic information systems (GIS) and mapping techniques have become very important for understanding issues related to research and practice in development, education, conservation, policy and related areas. GIS is a highly sought-after methodology that development and conservation practice is increasingly putting to use.

This course aims to provide practitioners, educators, researchers, and others working in the areas mentioned above with basic mapping and GIS skills, via exposure to a free, open-source GIS platform (Quantum GIS) which is available to all.

What will you learn?

On successful completion of the course, participants will be able to:

- Understand the basic principles of Geographical Information Systems (GIS).
- Appreciate how GIS can help to understand issues related to broad areas of education, development and conservation.
- Gain familiarity with using Quantum GIS (QGIS) – a state-of-the-art free, open source GIS software.
- Create maps using GIS, and relate these to issues of conservation, development, and other areas of research and practice.

Who should attend?

Primarily aimed at development and conservation practitioners, from NGOs. In addition, educators, researchers and PhD students may find the course interesting.

Pedagogy

The course is intended to be hands-on, focused on learning via doing in the lab, on the computer. In-class exercise datasets will be used for initial practice. Participants will also work on individual locations of their choice for additional practice, relating in-class work to their area and themes of interest.

Certificate of Participation

The participants will be awarded a certificate of participation on successful completion of five days.

Session-Wise Schedule

Monday / **June 17, 2019**

- Participant introductions.
- Introduction to GIS.
- Exploring QGIS software.
- Exploring Google Earth.
- Geometric registration.

Tuesday / **June 18, 2019**

- Introduction to Vector Data – points, lines, polygons.
- Digitization.
- Working on individual projects – geometric registration.

Wednesday / **June 19, 2019**

- Introduction to Symbology and Attributes.
- Labeling the digitized layers.
- Creating a map using Map Composer.
- Individual projects - Digitization of points, lines and polygons.

Thursday / **June 20, 2019**

- Importing and working with external datasets (e.g. elevation, rivers and roads, demography).
- Querying and basic GIS analysis.
- Individual projects - adding external layers, labelling, map making.

Friday / **June 21, 2019**

- Presentation of maps and group discussion.
- Closing session.
- Wrap-up, followed by group reflection, written feedback, and presentation of certificates.

* All the sessions will start at 9:30 am and end by 5pm.

Course Directors



Harini Nagendra

Harini Nagendra teaches sustainability at Azim Premji University. She has over 25 years of experience working on remote sensing and GIS for research on ecology, conservation and urban sustainability. Her research focuses on land cover change in forests and cities across South Asia as well as in other parts of the world. She has written over 150 research papers, and supervised a number of PhD students working on these topics.



Enakshi Bhar

Enakshi Bhar is an Electrical Engineer from Gujarat University and a Masters in Geomatics from CEPT University, Ahmedabad. She has 6 years of experience in Geographical Information Systems and Remote Sensing in CRDU, CEPT University, Ahmedabad and in Indian Institute of Science, Bangalore, respectively. She joined Azim Premji University in 2016 and currently works as a Mapping Lab Coordinator.

