Registration form may be printed in enlarged size on an A4 sheet and filled up completely.

Completed registration forms duly forwarded by competent authorities should reach IIT Bombay latest by 29 January 2016.

The completed registration form may be scanned and sent as a clearly readable PDF email attachment to one of the addresses below.

Prof. B.K. Mohan / Prof. Avik Bhattacharya
Centre of Studies in Resources Engineering (CSRE), IIT Bombay
Powai, Mumbai – 400076
Tel: 022-25767684 / 022-25767677
Fax: 022-25723190;
Email: bkmohan@csre.iitb.ac.in OR avikb@csre.iitb.ac.in

Mr. Shakti Sharma
Research Scholar
Centre of Studies in Resources Engineering (CSRE), IIT Bombay
Powai, Mumbai – 400076
Tel: 022-25764676 / 022-25767662
Fax: 022-25723190;
Email: shaktisharma@iitb.ac.in

Note: Shortlisted applicants will be intimated by email towards end of January 2016 and they are required to send a demand draft for Rs. 1000/- to confirm their participation in the course. This amount will be refunded to them at the end of the course. Those who confirm and fail to attend the course will forfeit this amount.

Aim of the Training Programme

The aim of this training programme is to provide the teaching community an exposure to both basics and recent advances in satellite image processing and analysis, dealing with high dimensional (hyperspectral) images, and microwave images (from synthetic aperture radar sensors). Faculty members for the programme are well known in the field of satellite image processing and Synthetic Aperture Radar applications. The first week covers multispectral and hyperspectral image analysis and second week is devoted to microwave synthetic aperture radar image processing, analysis and applications.

REGISTRATION

There is no registration fee for the course. The applicants SHOULD NOT send any demand drafts along with the application. Only the registration form and a statement-of-purpose are required by email.

Note:
Along with the completed registration form, the applicant should submit a statement-of-purpose why he/she is interested in this course and how it is expected to help in his/her research and teaching.

TRANSPORT, BOARDING & LODGING

Participants are entitled for Second Class (Sleeper Class) or III AC railway fare to and fro by the shortest route from college to IIT Bombay. All participants will be given auto fare from Kanjurmarg/Andheri to IIT on the dates of arrival and departure. Local participants will be paid second class railway fare or BEST Bus fare. Boarding and lodging will also be provided free of cost. Accommodation will be provided in the students Hostels. Since accommodation is limited, family members of the participants cannot be accommodated.
Remote Sensing is an important technology that provides excellent quality images of the Earth surface which are widely used today by application groups to derive a wide range of information including land use/land cover, urban sprawl, temporal changes in terrain conditions, forest and agriculture status, water and mountains and so on.

This course covers processing and analysis of remotely sensed satellite images acquired by optical / infrared and microwave imaging systems. Principles of multispectral, hyperspectral and synthetic aperture radar (SAR) image analysis will be discussed during the course. Some of the tools such as noise filtering, image transforms, machine learning techniques like support vector machines will also be discussed.

CSRE is well known for over two decades in the areas of remote sensing, GIS and applications to natural resources management. The Centre has carried out research in various areas of remote sensing, GIS, GPS, image processing and analysis, including development of software and e-learning materials and a wide range of application studies. The faculty for the course is well known at national / international level in optical/infrared and microwave satellite image analysis. The Centre is well known nationally for its contribution to the growth of remote sensing and GIS education in the country through academic and continuing education programmes.

Topics to be covered in the Training Programme

- Introduction to Remote Sensing
- Geo-Registration of Satellite Images
- Image Filters, Indices and Color Models
- Image Transforms and Classification
- Introduction to Imaging Spectroscopy
- Dimensionality Reduction and Mixture
- Introduction to Microwave Imaging
- SAR Image Processing
- Speckle Filtering and Noise Removal
- Texture Analysis
- SAR Interferometry
- SAR polarimetry
- SAR image analysis
- SAR applications for terrain modeling, urban and vegetation classification

Hands-On Sessions

Hands-on sessions will be suitably designed to supplement classroom discussions using satellite image analysis software.

Course Coordinators

Prof. B. Krishna Mohan / Prof. Avik Bhattacharya
CSRE, IIT Bombay
Powai, Mumbai – 400076
Tel: 022-25767684 / 022-25767677
Fax: 022-25723190;
Email: bkmohan/avikb@csre.iitb.ac.in

Registration Form

2-Week QIP Short Term Course on
Introduction to Analysis of Optical and Microwave Satellite Images

Venue: CSRE, IIT Bombay

Name: ____________________________________________
________________________________________ Gender: M / F

Designation: _______________________________________

College/Univ. _______________________________________

Qualification: _______________________________________

Mailing Address: ___________________________________

Mobile No.: _______________________________________

Email: ___________________________________________

Age : _______ Experience: _________________________

Prior Exposure to DIP: Yes / No

Accommodation required: YES / NO

Signature of Applicant →

Sponsorship & signature of Principal of the College / Institute (with date & seal) may please be attached with the registration form.