About the Course

The use of Remote Sensing (RS), Geographic Information System (GIS), Global Positioning System (GPS) and associated geo-spatial technologies is increasing rapidly, creating an urgent demand for trained manpower. IIRS utilizes the ISRO Satellites Ku-band facility to strengthen institutions by sharing IIRS faculty expertise in running this program to train students at undergraduate / postgraduate level at institutions that have established similar facility. IIRS has successfully conducted 6 such courses till March 2011 with participation of over 4200 students from 54 Indian Universities. “Basics of RS, GIS & GPS” course is scheduled to commence from August’ 2011.

Partners & Universities

The program is sponsored by NNRMS and is conducted with due help from CEC-UGC, CIET-CEC, New Delhi and DECU/SAC Ahmedabad. The 5th and 6th courses were attended by 26 and 10 universities respectively. IIRS has received massive participation from following universities. Ajmer U.; Allahabad U.; Amrita U.; Banasthali U.; BHU; BIT-M; GGU; Goa U.; Guwahati U.; HARSAC; IARI; IIT-R; Jadavpur U.; Jammu U.; JMI; JNU; JSAC; MKU; MPCOST; NIT-W; Panjab U.; Pune U.; Sagar U.; Shaijli U.; Walchand U.

Curriculum

The course structure is spread over 72 hrs of teaching on Basics of Remote Sensing, satellite image analysis, Geographical Information System, Global Positioning and Applications of natural resource, assessment and management. The lectures will be delivered through the latest “TrainNet” software which will enable participants to clear their doubts in real-time using Chat, Email and Live Video Chat interaction. Open Source Geospatial Foundation (OSGEO) India will provide special emphasis Open Source tools for RS & GIS. Course is structured into 4 Modules:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Course Curriculum</th>
<th>Duration</th>
<th>Total No. of Lectures</th>
<th>Total No. of Practical</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>RS &amp; DIP</td>
<td>18 hrs</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>GPS</td>
<td>7.5 hrs</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>GIS</td>
<td>28.5 hrs</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>RS &amp; GIS App.</td>
<td>18 hrs</td>
<td>12</td>
<td>0</td>
</tr>
</tbody>
</table>

Who can Participate

The registered participants who are under going undergraduate or post graduate courses are entitled to apply for the training program. Their applications have to be duly sponsored by university/ institute/ college and forwarded through coordinators from respective centres. It is not possible to accommodate individuals. Users receiving programs under CEC-UGC / CIET networks can also participate.

Satellite based Learning

EDUSAT (launched by GSLV-F01 on 20-9-2004) satellite is the first Indian satellite built exclusively for serving the educational sector. It is mainly intended to meet the demand for an interactive satellite based distance education system for the country. It strongly reflects India’s commitment to use space technology for national development, especially for the development of the population in remote and rural locations. The current course will be conducted using the INSAT-4CR satellite (GSLV-F04; 02-09-2007) co-located with EDUSAT at 74°E and broadcasting on the National Beam.

Role & Responsibilities of IIRS & Universities

IIRS is entirely responsible for implementation of the program with the support of its faculty stationed at Dehradun. The identified coordinators at university, supported by expert faculty of IIRS, assist the students for smooth conduct of training program. Coordinators help in administering various activities including obtaining feedback, completion of assignments/ tutorials and evaluation etc.
About IIRS

The Indian Institute of Remote Sensing (IIRS) under the aegis of Indian Space Research Organisation (ISRO), Department of Space, Government of India, established in 1966, is the premier training and education institute dealing with Remote Sensing, Geo-Information Science & GPS Technology and their Applications. IIRS endeavour has been to bring thematic experts from user community including academic institutions and train them in technology & applications at Postgraduate level with the overall goal of ‘technology transfer’. Institute has gained rich experience over the last 45 years in capacity building and implemented many innovative programs tuned to the different needs of various target groups, Satellite based training is an outreach Distance Learning Program exclusively launched for university students.

Workshop

In 2007, 2009 and 2010, three workshops have been conducted to gather feedback from participating universities and thereby conduct the future courses with improvements.

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Satellite based Distance Learning Program on “RS,GIS & GPS”
7th Course (Aug-Oct’ 2011)

Under the aegis of National Natural Resource Management System (NNRMS)