



Eighteenth IIRS Outreach Programme  
on  
Basics of “Remote Sensing, Geographical Information System and Global  
Navigation Satellite System”

**August 22 – November 18, 2016**

**Tentative Schedule**

Module	Name of the Module	Duration	
		From	To
1	Remote Sensing and Digital Image Analysis	22-08-2016	14-09-2016
2	Global Navigation Satellite System	15-09-2016	26-09-2016
3	Geographical Information System	27-09-2016	30-10-2016
4	RS & GIS Applications	31-10-2016	18-11-2016

**Technical Support from**

A-VIEW, Amrita University, Coimbatore

**Under the aegis of**

National Natural Resources Management System (NNRMS)

July, 2016

Module 1: Remote Sensing & Digital Image Analysis				
Module Coordinator: Ms. Minakshi Kumar				
Date	Day	Time	Topic	Speaker
22 Aug 16	Monday	1600-1730 hrs	Course Inauguration and Introductory Lecture	Dr. A. Senthil Kumar
23 Aug 16	Tuesday	1600-1730 hrs	Basic Principles of Remote Sensing	Mrs. Minakshi Kumar
24 Aug 16	Wednesday	1600-1730 hrs	Earth Observation Sensors and Platforms	Mr. Vinay Kumar
<b>25 Aug 16</b>	<b>Thursday</b>		<b>Janmashtami</b>	
26 Aug 16	Friday	1600-1730 hrs	Thermal Remote Sensing	Dr. Yogesh Kant
<b>27 Aug 16</b>	<b>Saturday</b>			
<b>28 Aug 16</b>	<b>Sunday</b>			
29 Aug 16	Monday	1600-1730 hrs	Spectral Signatures of Different Land cover Features and Visual Image interpretation	Dr. Hina Pande
30 Aug 16	Tuesday	<b>Offline (Morning Session)</b>	RS and Image Interpretation Practical	By University Coordinator
		1600-1730 hrs	Digital Image Processing: Basic Concepts Rectification and Registration	Mrs. Minakshi Kumar
<b>31 Aug 16</b>	<b>Wednesday</b>	<b>BREAK</b>		
01 Sep 16	Thursday	1600-1730 hrs	Digital Image Processing: Basic Concepts Rectification and Registration	Mrs. Minakshi Kumar
02 Sep 16	Friday	1600-1730 hrs	Image Enhancement techniques	Dr. Poonam S. Tiwari
<b>03 Sep 16</b>	<b>Saturday</b>			
<b>04 Sep 16</b>	<b>Sunday</b>			
<b>05 Sep 16</b>	<b>Monday</b>	<b>GANESH CHATURTHI</b>		
<b>06 Sep 16</b>	<b>Tuesday</b>	<b>BREAK</b>		
07 Sep 16	Wednesday	1600-1730 hrs	Image Classification Techniques and Accuracy Assessment	Dr. Poonam S. Tiwari
08 Sep 16	Thursday	1600-1730 hrs	Hyperspectral Remote Sensing	Mrs. Shefali Agarwal
09 Sep 16	Friday	<b>Offline - as per computer lab availability Morning Session</b>	Image Processing Hands-on and Practical Assignment	By University Coordinator
		1600-1730 hrs	Demonstration: Image Processing	Mrs. Minakshi Kumar
<b>10 Sep 16</b>	<b>Saturday</b>			
<b>11 Sep 16</b>	<b>Sunday</b>			
<b>12 Sep 16</b>	<b>Monday</b>	<b>ID-UL-JUHA(BAKRID)</b>		
13 Sep 16	Tuesday	<b>Offline - as per computer lab availability</b>	Practical Assignment submission by Participants to respective coordinators and evaluation to be done by respective coordinators	
		1600-1730 hrs	Panel Discussion (Mrs. Shefali Agarwal, Mrs. Minakshi Kumar, Dr. Yogesh Kant, Dr. Poonam S. Tiwari, Dr. Hina Pande, Ms. Manu Mehta, Mr. Vinay Kumar, Mr. Shashi Kumar)	
<b>14 Sep 16</b>	<b>Wednesday</b>	<b>ONAM/BREAK</b>		
Module-2 Global Navigation Satellite System				
Module Coordinator: Shri Ashutosh Bhardwaj				
15 Sep 16	Thursday	1600-1730 hrs	Introduction to GPS and GNSS	Er. Ashutosh Bhardwaj
16 Sep 16	Friday	1600-1730 hrs	GPS receivers, processing methods, errors and accuracy	Er. Ashutosh Bhardwaj
<b>17 Sep 16</b>	<b>Saturday</b>			
<b>18 Sep 16</b>	<b>Sunday</b>			
<b>19 Sep 16</b>	<b>Monday</b>	<b>1600-1730 hrs</b>	Satellites based Augmentation systems & GPS Aided and GEO Augmented Navigation (GAGAN)	Er. Ashutosh Bhardwaj
20 Sep 16	Tuesday	1600-1730 hrs	GPS signal characteristics, Data formats (broadcast, precise ephemeris)	S. Raghavendra
21 Sep 16	Wednesday	<b>BREAK</b>		
22 Sep 16	Thursday	1600-1730 hrs	Indian Regional Navigation Satellite System (IRNSS)	Er. Ashutosh Bhardwaj & Shri Kamal Pandey
23 Sep 16	Friday	1600-1730 hrs	DGPS demonstration (Pre-recorded followed by live query session)	S. Raghavendra
24 Sep 16	<b>Saturday</b>			
25 Sep 16	<b>Sunday</b>			
26 Sep 16	Monday	1600-1730 hrs	Mobile Mapping	Dr. Harish Chandra Karnatak
Module-3- Geographical Information System				
Module Coordinator: Shri Prasun Kumar Gupta				
Date	Day	Time	Topic	Speaker
27 Sep 16	Tuesday	1600-1730 hrs	Introduction to GIS	Dr. Sameer Saran
28 Sep 16	Wednesday	1600-1730 hrs	Geographic Phenomena, Concepts and examples	Dr. Sameer Saran
29 Sep 16	Thursday	<b>BREAK</b>		
<b>30 Sep 16</b>	<b>Friday</b>	<b>Exam Module-1 &amp; 2</b>		

01 Oct 16	<b>Saturday</b>			
02 Oct 16	<b>Sunday</b>	<b>Mahatma Gandhi Jayant</b>		
03 Oct 16	Monday	1600-1730 hrs	Data Inputting and Editing in GIS	Shri Shiva Reddy
04 Oct 16	Tuesday	1600-1730 hrs	GIS Data Models (Spatial and Non spatial)	Shri Ashutosh Kumar Jha
05 Oct 16	<b>Wednesday</b>	<b>Break</b>		
06 Oct 16	Thursday	1600-1730 hrs	Map Projection Concepts & Use in RS & GIS	Shri Ashutosh Srivastav
07 Oct 16	Friday	1600-1730 hrs	Spatial Analysis- Introductory Concepts and Overview	Shri Kapil Oberai
08 Oct 16	Saturday			
09 Oct 16	Sunday			
10 Oct 16	<b>Monday</b>	1600-1730 hrs	Spatial Analysis- Functionality and Tools	Shri Kapil Oberai
11 Oct 16	<b>Tuesday</b>	<b>DUSSHERA</b>		
12 Oct 16	<b>Wednesday</b>	<b>MUHARRAM</b>		
13 Oct 16	Thursday	1600-1730 hrs	Spatial Data Management using RDBMS-Demo on PostGRE SQL+ Post GIS	Shri Kapil Oberai
14 Oct 16	Friday	1600-1730 hrs	3D GIS and Applications including Trivim	Shri Shiva Reddy
15 Oct 16	<b>Saturday</b>			
16 Oct 16	<b>Sunday</b>			
17 Oct 16	Monday	1600-1730 hrs	Open Source S/w Technology & Tools	Shri P K Gupta
18 Oct 16	Tuesday	1600-1730 hrs	Data Quality & Policies OGC, NSDI & GSDI initiatives. Discussion on Internet resources	Dr. Harish Karnatak
19 Oct 16	Wednesday	1600-1730 hrs	Demo of QGIS Software – Session 01: • Adding GIS Data ,Attribute table & identity tool • Change symbology, Create map composers • Manage plugins, CRS & EPSG • Geo-referencing & Tie-points , RMSE & Rectification	Shri P K Gupta
20 Oct 16	Thursday	1600-1730 hrs	Demo of QGIS Software – Session 02: (Data Creation/Vector Generation) • Digitization ,Setting digitizing environment • Adding attributes to layer, Editing digitized layer • Attribute Queries, Spatial Queries Linking spatial & non-spatial data	Shri P K Gupta
21 Oct 16	Friday	1600-1730 hrs	Geo-Web Services and Mobile Mapping: Technical Concepts	Dr. Harish Karnatak
22 Oct 16	<b>Saturday</b>			
23 Oct 16	<b>Sunday</b>			
24 Oct 16	Monday	1600-1730 hrs	Geoweb Services and Geo Portal Applications	Dr. Harish Karnatak
25 Oct 16	Tuesday	1600-1730 hrs	Uncertainty in GIS and Error Propagation	Shri Hari Shankar
26 Oct 16	<b>Wednesday</b>	<b>BREAK</b>		
27 Oct 16	Thursday	1600-1730 hrs	Customization in GIS	Shri Kamal Pandey
28 Oct 16	Friday	1600-1730 hrs		
29 Oct 16	<b>Saturday</b>			
30 Oct 16	<b>Sunday</b>			
<b>Module-4 RS &amp; GIS Applications</b> <b>Module Coordinator: Dr. Arijit Roy</b>				
<b>Date</b>	<b>Day</b>	<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
31 Oct 16	Monday	1600-1730 hrs	EO Applications for Natural Resources and Disaster Management	Dr. S. K Srivastav
01 Nov 16	Tuesday	1600-1730 hrs	Remote Sensing and GIS Applications in Soil Resource Assessment	Dr.Suresh Kumar
02 Nov 16	<b>Wednesday</b>	<b>BREAK</b>		
03 Nov 16	Thursday	1600-1730 hrs	Remote Sensing Applications in Agriculture- Crop Inventory & Yield Forecasting	Dr. N.R. Patel
04 Nov 16	Friday	1600-1730 hrs	RS & GIS Applications in Forestry and Ecology	Dr.Sarnam Singh
05 Nov 16	<b>Saturday</b>			
06 Nov 16	<b>Sunday</b>			
07 Nov 16	Monday	1600-1730 hrs	Engineering Geology with emphasis on landslide studies	Dr. P.K.C.Ray
08 Nov 16	Tuesday	1600-1730 hrs	Geology and Geomorphology	
09 Nov 16	Wednesday	1600-1730 hrs	Space-enabled Products & Services for Disaster Management :Indian Initiatives	Dr. S. K Srivastav
10 Nov 16	Thursday	1600-1730 hrs	RS & GIS Applications to Water Resources Management	Dr. S.P Aggarwal
11 Nov 16	Friday	1600-1730 hrs	RS & GIS for Coastal Zone Management	Dr. D. Mitra
12 Nov 16	<b>Saturday</b>			
13 Nov 16	<b>Sunday</b>			
14 Nov 16	<b>Monday</b>	<b>Guru Nanak's Birthday</b>		
15 Nov 16	Tuesday	1600-1730 hrs	Remote Sensing Application to Atmospheric & Marine Environment	Dr. A.K Mishra
16 Nov 16	Wednesday	1600-1730 hrs	RS & GIS Application in Urban & Regional Planning	Dr. Pramod Kumar
17 Nov 16	<b>Thursday</b>	<b>1600-1730 hrs</b>	<b>Examination Module-3 &amp; 4</b>	
18 Nov 16	<b>Friday</b>	<b>1600-1730 hrs</b>	<b>Panel discussion Feedback</b>	