
**Twenty-third IIRS Outreach Programme
On
Basic of RS, GIS & GNSS**

Sl No.	Module Name	From	To
1	Remote Sensing and Digital Image Analysis	22-08-2017	15-09-2017
2	Global Navigation Satellite System & Geographical Information System	25-09-2017	10-11-2017
3	RS & GIS Applications	13-11-2017	04-12-2017

Technical Support from
A-VIEW, Amrita University, Coimbatore

August, 2017

Module 1: Remote Sensing & Digital Image Analysis
Module/ Course Coordinator: Ms. Minakshi Kumar

Date	Day	Time	Topic	Speaker
21 Aug 17	Monday	1600-1730 hrs	Course Inauguration and Introductory Lecture	Dr. A. Senthil Kumar
22 Aug 17	Tuesday	1600-1730 hrs	Basic Principles of Remote Sensing	Mrs. Manu Mehta
23 Aug 17	Wednesday	1600-1730 hrs	Earth Observation Sensors and Platforms	Mr. Vinay Kumar
24 Aug 17	Thursday	1600-1730 hrs	Thermal Remote Sensing	Dr. Yogesh Kant
25 Aug 17	Ganesh Chaturthi			
26 Aug 17	Saturday			
27 Aug 17	Sunday			
28 Aug 17	Monday	1600-1730 hrs	Spectral Signatures of Different Land cover Features and Visual Image interpretation	Dr. Hina Pande
29 Aug 17	Tuesday	Offline (Morning Session)	RS and Image Interpretation Practical	By University Coordinator
30 Aug 17	Wednesday	BREAK		
31 Aug 17	Thursday	1600-1730 hrs	Digital Image Processing: Basic Concepts Rectification and Registration	Mrs. Minakshi Kumar
01 Sep 17	Friday	1600-1730 hrs	Image Enhancement techniques	Dr. Poonam S. Tiwari
02 Sep 17	Saturday			
03 Sep 17	Sunday			
04 Sep 17	Monday	BREAK-ONAM		
05 Sep 17	Tuesday	1600-1730 hrs	Image Classification Techniques and Accuracy Assessment	Dr. Poonam S. Tiwari
06 Sep 17	Wednesday	1600-1730 hrs	Microwave Remote Sensing	Mr. Shashi Kumar
07 Sep 17	Thursday	1600-1730 hrs	Demonstration: Image Processing	Mrs. Minakshi Kumar
08 Sep 17	Friday	Offline - as per computer lab availability Morning Session	Image Processing Hands-on and Practical Assignment	By University Coordinator
09 Sep 17	Saturday			
10 Sep 17	Sunday			
11 Sep 17	Monday	1600-1730 hrs	Hyperspectral Remote Sensing	Mrs. Shefali Agarwal
12 Sep 17	Tuesday	Offline - as per computer lab availability	Practical Assignment submission by Participants to respective coordinators and evaluation to be done by respective coordinators	University coordinator
13 Sep 17	Wednesday	1600-1730 hrs	Panel Discussion Moule-1	Faculty of Module-1
14 Sep 17	BREAK For Examination			
15 Sep 17	Friday	9:30 Hrs to 17:00 Hrs	*Online Examination of 24 th Course	Edusat Team

Module- 2 Global Navigation Satellite System and Geographical Information System Module/ Course Coordinator: Shri Ashutosh Bhardwaj & Shri Prasun Kumar Gupta				
25 Sep 17	Monday	1600-1730 hrs	Introduction to GPS and GNSS	Er. Ashutosh Bhardwaj
26 Sep 17	Tuesday	1600-1730 hrs	GPS receivers, processing methods, errors and accuracy	Er. Ashutosh Bhardwaj
27 Sep 17	Wednesday	1600-1730 hrs	Satellites based Augmentation systems & GPS Aided and GEO Augmented Navigation (GAGAN)	Er. Ashutosh Bhardwaj
28 Sep 17	Thursday	1600-1730 hrs	GPS signal characteristics, Data formats (broadcast, precise ephemeris)	Shri S. Raghavendra
29 Sep 17			BREAK	
30 Sep 17	Dussehra -Saturday			
01 Oct 17	Sunday			
02 Oct 17	Monday		Gandhi Jayanthi	
Date	Day	Time	Topic	Speaker
03 Oct 17	Tuesday	1600-1730 hrs	Indian Regional Navigation Satellite System (IRNSS)	Er. Ashutosh Bhardwaj & Shri Kamal Pandey
04 Oct 17	Wednesday	1600-1730 hrs	DGPS demonstration (Pre-recorded followed by live query session)	Shri S. Raghavendra
05 Oct 17	Thursday	1600-1730 hrs	Mobile Mapping	Dr. Harish Chandra Karnatak
06 Oct 17	Friday		BREAK	
07 Oct 17	Saturday			
08 Oct 17	Sunday			
Geographical Information System Module/ Course Coordinator: Shri Prasun Kumar Gupta				
09 Oct 17	Monday	1600-1730 hrs	Introduction to GIS	Dr. Sameer Saran
10 Oct 17	Tuesday	1600-1730 hrs	Geographic Phenomena, Concepts and examples	Shri P K Gupta
11 Oct 17	Wednesday	1600-1730 hrs	Data Inputting and Editing in GIS	Shri Shiva Reddy
12 Oct 17	Thursday	1600-1730 hrs	GIS Data Models (Spatial and Non spatial)	Shri Ashutosh Kumar Jha
13 Oct 17	Friday	1600-1730 hrs	Map Projection Concepts & Use in RS & GIS	Dr. Ashutosh Srivastav
14 Oct 17	Saturday			
15 Oct 17	Sunday			
16 Oct 17	Monday	1600-1730 hrs	Spatial Analysis- Introductory Concepts and Overview	Shri Prabhkar Alok Verma
17 Oct 17	Tuesday	1600-1730 hrs	Spatial Analysis- Functionality and Tools	Shri Kapil Oberai
18 Oct 17	BREAK			
19 Oct 17	Diwali			
20 Oct 17	BREAK			
21 Oct 17	Saturday			
22 Oct 17	Sunday			
23 Oct 17	BREAK			
24 Oct 17	BREAK			
25 Oct 17	BREAK			
26 Oct 17	Thursday	1600-1730 hrs	Demo of QGIS Software – Session 01: <ul style="list-style-type: none"> • Adding GIS Data ,Attribute table & identity tool • Change symbology, Create map composers • Manage plugins, CRS & EPSG • Geo-referencing & Tie-points , RMSE & Rectification 	Recorded Lecture Through FTP will be played by University coordinator
27 Oct 17	Friday	1600-1730 hrs	Demo of QGIS Software – Session 02: (Data Creation/Vector Generation) <ul style="list-style-type: none"> • Digitization ,Setting digitizing environment • Adding attributes to layer, Editing digitized layer • Attribute Queries, Spatial Queries <small>Linking spatial & non-spatial data</small>	Recorded Lecture Through FTP will be played by University coordinator
28 Oct 17	Saturday			
29 Oct 17	Sunday			

30 Oct 17	Monday	1500-1545hrs	Interactive Session of Demo of QGIS Software – Session 01 & Session 02	Shri P K Gupta
		1600-1730 hrs	Open Source S/w Technology & Tools	Shri P K Gupta
31 Oct 17	Tuesday	1600-1730 hrs	Data Quality & Policies OGC, NSDI & GSDI initiatives. Discussion on Internet resources	Dr. Harish Karnatak
01 Nov 17	BREAK			
02 Nov 17	Thursday	1600-1730 hrs	3D GIS and Application including Trivim	Shri Shiva Reddy
03 Nov 17	Friday	1600-1730 hrs	Geo-Web Services: Technical Concepts and Applications	Dr. Harish Karnatak
04 Nov 17	Saturday – Guru Nanak Birthday			
05 Nov 17	Sunday			
06 Nov 17	Monday	1600-1730 hrs	Uncertainty in GIS and Error Propagation	Shri Hari Shankar
07 Nov 17	Tuesday	1600-1730 hrs	Customization in GIS	Shri Kamal Pandey
08 Nov 17	Wednesday	1600-1730 hrs	Recent Trends in Geoinformatics	Dr. Sameer Saran
09 Nov 17	Thursday	1600-1730 hrs	Panel Discussion of Module 2	Faculty of Module-2
10 Nov 17	Friday	9:30 Hrs to 17:00 Hrs	*Online Exam 26 th Course - Global Navigation Satellite System and Geographical Information System	Edusat Team

Module-3 RS & GIS Applications				
Module/ Course Coordinator: Dr. Arijit Roy				
Date	Day	Time	Topic	Speaker
13 Nov 17	Monday	1600-1730 hrs	Space Technology & its applications in governance	Dr. S. K Srivastav
14 Nov 17	Tuesday	1600-1730 hrs	Remote Sensing and GIS Applications in Soil Resource Assessment	Dr. Suresh Kumar
15 Nov 17	Wednesday	1600-1730 hrs	Remote Sensing Applications in Agriculture- Crop Inventory & Yield Forecasting	Dr. N.R. Patel
16 Nov 17	Thursday	1600-1730 hrs	RS & GIS Applications in Forestry and Ecology	Dr. Sarnam Singh
17 Nov 17	Friday	1600-1730 hrs	Engineering Geology with emphasis on landslide studies	Dr. Shovan Chatteraj
18 Nov 17	Saturday			
19 Nov 17	Sunday			
20 Nov 17	Monday	1600-1730 hrs	Geology and Geomorphology	Dr. R.S. Chatterjee
21 Nov 17	Tuesday	1600-1730 hrs	Space-enabled Products & Services for Disaster Management :Indian Initiatives	Dr. P.K.C.Ray
22 Nov 17	Wednesday	1600-1730 hrs	Geospatial Technology for climate change studies	Dr. Arijit Roy
23 Nov 17	Thursday	1600-1730 hrs	RS & GIS Applications to Water Resources Management	Dr. S.P Aggarwal
24 Nov 17	Friday	1600-1730 hrs	RS & GIS for Coastal Zone Management	Dr. D. Mitra
25 Nov 17	Saturday			
26 Nov 17	Sunday			
27 Nov 17	Monday	1600-1730 hrs	Remote Sensing Application to Atmospheric & Marine Environment	Dr. A.K Mishra
28 Nov 17	Tuesday	1600-1730 hrs	RS & GIS Application in Urban & Regional Planning	Dr. Pramod Kumar
29 Nov 17	Wednesday	1600-1730 hrs	Geo-web Services and mobile GIS in governance	Dr. Harish Karnatak
30 Nov 17	Thursday	1600-1730 hrs	Panel Discussion Module-3	Faculty of Module-3
04 Dec 17	Monday	9:30 Hrs to 17:00 Hrs	Online Examination 27 th Course	Edusat Team
08 Dec 17	Friday	9:30 Hrs to 17:00 Hrs	*Online Examination of 23 rd Course Basic of RS, GIS & GNSS on completion of Full course	Edusat Team

There will be one exam for each Course in which you have applied.

Sl No	Exam Name	Exam Date
1.	Online Examination 24 th Course on <i>Remote Sensing & Digital Image Analysis</i>	15 Sept 2017
2.	Online Examination 26 th Course on <i>Global Navigation Satellite System and Geographical Information System</i>	10 Nov 2017
3.	Online Examination 27 th Course on <i>RS & GIS Applications</i>	04 Dec 2017
4.	Online Examination of 23 rd Course on <i>Basic of RS, GIS & GNSS</i>	08 Dec 2017