

**Fifty IIRS Outreach Programme
On
Basic of RS, GIS & GNSS**

Course Schedule

Sl No.	Course Name	Module Name	From	To
1.	Basic of RS, GIS & GNSS	-	19-08-2019	22-11-2019
2.	Remote Sensing & Digital Image Analysis	Module-1	19 Aug	09 Sep
3.	Global Navigation Satellite System	Module-2	12 Sep	24 Sep
4.	Geographical Information System Module	Module-3	25Sep	24 Oct
5.	RS & GIS Applications	Module-4	29 Oct	22 Nov

August, 2019

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

Date	Day	Time	Topic	Speaker
19 Aug 19	Monday	1530-1550 hrs	Course Inauguration	Dr. S.K.Srivastav
19 Aug 19	Monday	1600-1730 hrs	Basic Principles of Remote Sensing	Dr. Manu Mehta
20 Aug 19	Tuesday	1600-1730 hrs	Earth Observation Sensors and Platforms	Mr. Vinay Kumar
21 Aug 19	Wednesday	1600-1730 hrs	Thermal Remote Sensing	Dr. Yogesh Kant
22 Aug 19	Thursday	1600-1730 hrs	Spectral Signatures of Different Land cover Features and Visual Image interpretation	Dr. Hina Pande
23 Aug 19	Friday	1600-1730 hrs	Introduction to RS Data Products	Dr. Hina Pande
24 Aug 19	-	Saturday	-	
25 Aug 19	-	Sunday	-	
26 Aug 19	Monday	Offline	RS and Image Interpretation Practical	By University Coordinator
27 Aug 19	Tuesday	1600-1730 hrs	Digital Image Processing: Basic Concepts Rectification and Registration	Ms. Minakshi Kumar
28 Aug 19	Wednesday	1600-1730 hrs	Image Enhancement techniques- Contrast, Filtering Transformations	Ms. Minakshi Kumar
29 Aug 19	Thursday	1600-1730 hrs	Image Classification Techniques – Unsupervised, Supervised and Separability Analysis	Dr. Poonam S. Tiwari
30 Aug 19	Friday	1600-1730 hrs	Hyperspectral Remote Sensing	Mr. Vinay Kumar
31 Aug 19		Saturday	-	
01 Sep 19		Sunday	-	
02 Sep 19		Monday	Vinayaka Chaturthi	
03 Sep 19	Tuesday	1600-1730 hrs	Digital Change Detection and Accuracy Assessment	Dr. Poonam S. Tiwari
04 Sep 19	Wednesday	1630-1730 hrs	Image Processing hands on using ILWIS	Ms. Minakshi Kumar
05 Sep 19	Thursday	Offline - as per computer lab availability	Image Processing Hands-on and Practical Assignment	By University Coordinator
06 Sep 19	Friday	1630-1730 hrs	Digital Data Browsing	Dr. Poonam S . Tiwari
07 Sep 19	-	Saturday	-	
08 Sep 19	-	Sunday	-	
11 Sep 19	Wednesday	1600-1730 hrs	Microwave Remote Sensing	Dr. Shasi Kumar

Module- 2 Global Navigation Satellite System				
Module/ Course Coordinator: Shri Ashutosh Bhardwaj				
12 Sep 19	Thursday	1600-1730 hrs	Introduction to GPS and GNSS	Er. Ashutosh Bhardwaj
13 Sep 19	Friday	1600-1730 hrs	GPS receivers, processing methods, errors and accuracy	Er. Ashutosh Bhardwaj
14 Sep 19	-	-	Saturday	
15 Sep 19	-	-	Sunday	
16 Sep 19	Monday	1600-1730 hrs	Satellites based Augmentation systems & GPS Aided and GEO Augmented Navigation (GAGAN)	Er. Ashutosh Bhardwaj
17 Sep 19	Tuesday	1600-1730 hrs	GPS signal characteristics, Data formats (broadcast, precise ephemeris)	Shri S. Raghavendra
18 Sep 19	Wednesday	1600-1730 hrs	Indian Regional Navigation Satellite System (IRNSS)	Er. Ashutosh Bhardwaj & Shri Kamal Pandey
19 Sep 19	Thursday	1600-1730 hrs	DGPS demonstration (Pre-recorded followed by live query session)	Offline
20 Sep 19	Friday	1600-1730 hrs	Advance GNSS processing	Shri Suresh Kannaujiya
21 Sep 19	-	-	Saturday	
22 Sep 19	-	-	Sunday	
23 Sep 19	Monday	1600-1730 hrs	Mobile Mapping	Dr. Harish Chandra Karnatak
24 Sep 19	Tuesday	1600-1730 hrs	Demonstration on Mobile mapping applications	Sh. Kamal Pandey

Module- 3 Geographical Information System Module/ Course Coordinator: Shri Prasun Kumar Gupta

25 Sep 19	Wednesday	1600-1730 hrs	Introduction to GIS	Dr. Sameer Saran
26 Sep 19	Thursday	1600-1730 hrs	Geographic Phenomena, Concepts and examples	Shri Prasun Kumar Gupta
27 Sep 19	Friday	1600-1730 hrs	Data Inputting and Editing in GIS	Shri K. Shiva Reddy
28 Sep 19		Saturday		
29 Sep 19		Sunday		
30 Sep 19	Monday	1600-1730 hrs	GIS Data Models (Spatial and Non spatial)	Shri Ashutosh Kumar Jha
01 Oct 19	Tuesday	1600-1730 hrs	Map Projection Concepts & Use in RS & GIS	Dr. Ashutosh Srivastav
02 Oct 19			Mahatma Gandhi	
03 Oct 19	Thursday	1600-1730 hrs	Spatial Analysis - Introductory Concepts and Overview	Shri Prabhhar Alok Verma
04 Oct 19	Friday	1600-1730 hrs	Spatial Analysis - Functionality and Tools	Shri Kapil Oberai
05 Oct 19	Saturday			
06 Oct 19	Sunday			
07 Oct 19	Monday		Dussehra (Maha Navmi)	
08 Oct 19	Tuesday		Dussehra (Vijay Dushmi)	
09 Oct 19	Wednesday		Festival Break	
10 Oct 19	Thursday		Festival Break	
11 Oct 19	Friday	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	Recorded Lecture
12 Oct 19	Saturday	-	-	-
13 Oct 19	Sunday		-	-
14 Oct 19	Monday	1600-1730 hrs	Demo of QGIS Software – Session 02: (Data Creation/Vector Generation) Digitization, Setting digitizing environment Adding attributes, Editing digitized layer Attribute Queries, Spatial Queries Linking spatial & non-spatial data	Recorded Lecture
15 Oct 19	Tuesday	1600-1730 hrs	DEMO on QGIS 03	Shri Prasun Kumar Gupta
16 Oct 19	Wednesday	1530-1555hrs 1600-1730 hrs	Interactive Session of Demo of QGIS Software – Session 01 & Session 02 & 03 Open Source Software Technology & Tools	Shri Prasun Kumar Gupta
17 Oct 19	Thursday	1600-1730 hrs	Data Quality & Policies OGC, NSDI & GSDI initiatives. Discussion on Internet resources	Dr. Harish Karnatak
18 Oct 19	Friday	1600-1730 hrs	Advanced Geospatial Modeling	Shri Ashutosh Kumar Jha
19 Oct 19	Saturday	-	-	
20 Oct 19	Sunday	-	-	

21 Oct 19	Monday	1600-1730 hrs	Uncertainty in GIS and Error Propagation	Shri Hari Shankar
22Oct 19	Tuesday	1600-1730 hrs	3D GIS, City Models and Applications	Dr. Sameer Saran
23 Oct 19	Wednesday	1600-1730 hrs	Recent Trends in Geoinformatics	Dr. Sameer Saran
24Oct 19	Thursday	1600-1730 hrs	Panel Discussion	All Faculty
25 Oct 19	Friday	-	Dipwali Festival Break	
26 Oct 19	Saturday	-	-	
27 Oct 19	Sunday	-	Deepavali	
28 Oct 19	Monday	1600-1730 hrs	Festival Break	

RS & GIS Applications
Module/ Course Coordinator: Dr. C M Bhatt

Date	Day	Time	Topic	Speaker
29 Oct 19	Tuesday	1600-1730 hrs	Applications of Remote Sensing & other Geospatial Technologies in Natural Resources Management, Development & Governance	Dr. S. K Srivastav
30 Oct 19	Wednesday	1600-1730 hrs	Applications of Geo-web Services and mobile GIS in governance	Dr. Harish Karnatak
31 Oct 19	Thursday	1600-1730 hrs	Remote Sensing Applications in Agriculture- Crop Inventory & Yield Forecasting	Dr. N.R. Patel
01 Nov 19	Friday	1600-1730 hrs	RS & GIS for Coastal Zone Management	Dr. D. Mitra
02 Nov 19	Saturday	-	Break	
03 Nov 19	Sunday	-	Break	
04 Nov 19	Monday	1600-1730 hrs	Engineering Geology with emphasis on landslide studies	Dr. Shovan Chatteraj
05 Nov 19	Tuesday	1600-1730 hrs	Geology and Geomorphology	Dr. R.S. Chatterjee
06 Nov 19	Wednesday	1600-1730 hrs	Break	
07 Nov 19	Thursday	1600-1730 hrs	Space-enabled Products & Services for Disaster Management :Indian Initiatives	Dr. P.K.C.Ray
08 Nov 19	Friday	1600-1730 hrs	RS & GIS Application in Urban & Regional Planning	Shri. Pramod Kumar
09 Nov 19		Saturday		
10 Nov 19		Sunday		
11 Nov 19	Monday	1600-1730 hrs	Break	
12 Nov 19			Break	
13 Nov 19	Wednesday	1600-1730 hrs	Remote Sensing Application to Atmospheric & Marine Environment	Dr. A.K Mishra
14 Nov 19	Thursday	1600-1730 hrs	RS & GIS Applications in Forestry and Ecology	Dr. Hitendra Padalia
15 Nov 19	Thursday	1630 – 1730 hrs	RS applications for Planetary Studies	Dr. Prakash Chauhan
16 Nov 19	Saturday	-		
17 Nov 19	Sunday	-		
18 Nov 19	Monday	1600-1730 hrs	RS & GIS Applications to Water Resources Management	Dr. S.P Aggarwal
19 Nov 19	Tuesday	1600-1730 hrs	Geospatial Technology for climate change studies	Dr. Arijit Roy
20 Nov 19	Wednesday	1630 – 1730 hrs	Break	
21 Nov 19	Thursday	1600-1730 hrs	Remote Sensing and GIS Applications in Soil Resource Assessment	Dr. Suresh Kumar
22 Nov 19	Friday	1600-1730 hrs	Panel Discussion Module-3	All speakers

50th Course on Basic of RS, GIS & GNSS Consist 04 Module

- 1- Remote Sensing & Digital Image Analysis
- 2- Global Navigation Satellite System
- 3- Geographical Information System
- 4- RS & GIS Applications

There will be 01 exam for Basic of RS, GIS & GNSS after completion of the course

And a single exam for each Course no 51th, 52th, 53th and 54th course

Sl. No	Exam Name	Exam Date
1-	Online Examination 51 th Course or Module1 on Remote Sensing and Digital Image Analysis	Last week of the Month
2-	Online Examination 52 th Course or Module 1 on Global Navigation Satellite System	Will be conducted first week and last week of the Month
3-	Online Examination of 53 th Course or Module 3 on Geographical Information System	Will be conducted first week and last week of the Month
4-	Online Examination of 54 th Course or Module 4 on <i>RS & GIS Applications</i>	Will be conducted first week and last week of the Month