

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

**Tentative Course Schedule**

Sl No.	Course Name	Module Name	From	To
1.	Basic of RS, GIS & GNSS	-	19-08-2019	15-11-2019
2.	Remote Sensing & Digital Image Analysis	Module-1	19 Aug	06 Sep
3.	Global Navigation Satellite System	Module-2	09 Sep	20 Sep
4.	Geographical Information System Module	Module-3	23Sep	21 Oct
5.	RS & GIS Applications	Module-4	23 Oct	15 Nov

July, 2019

<b>Module 1: Remote Sensing &amp; Digital Image Analysis</b>				
<b>Module/ Course Coordinator: Mrs. Minakshi Kumar</b>				
Date	Day	Time	Topic	Speaker
19 Aug 19	Monday	1600-1730 hrs	Course Inauguration and Introductory Lecture , Indian Space Programme	Dr. Prakash Chauhan
20 Aug 19	Tuesday	1600-1730 hrs	Basic Principles of Remote Sensing	Ms. Manu Mehta
21 Aug 19	Wednesday	1600-1730 hrs	Earth Observation Sensors and Platforms	Mr. Vinay Kumar
22 Aug 19	Thursday	1600-1730 hrs	Thermal Remote Sensing	Dr. Yogesh Kant
23 Aug 19	Friday	1600-1730 hrs	Spectral Signatures of Different Land cover Features and Visual Image interpretation	Dr. Hina Pande
<b>24 Aug 19</b>		<b>Saturday</b>		
<b>25 Aug 19</b>		<b>Sunday</b>		
26 Aug 19	Monday	1600-1730 hrs	Digital Image Processing: Basic Concepts Rectification and Registration	Ms. Minakshi Kumar
27 Aug 19	Tuesday	1600-1730 hrs	Image Enhancement techniques	Dr. Poonam S. Tiwari
28 Aug 19	Wednesday	1600-1730 hrs	Image Classification Techniques and Accuracy Assessment	Dr. Poonam S. Tiwari
29 Aug 19	Thursday	Offline (Morning Session)	RS and Image Interpretation Practical	By University Coordinator
29 Aug 19	Thursday	1600-1730 hrs	Microwave Remote Sensing	Mr. Shashi Kumar
30 Aug 19	Friday	1630-1730 hrs	Demonstration: Image Processing	Ms. Minakshi Kumar
31 Aug 19		<b>Saturday</b>		
01 Sep 19		<b>Sunday</b>		
02 Sep 19		<b>Monday</b>	<b>Vinayaka Chaturthi</b>	
03 Sep 19	Tuesday	1600-1730 hrs	Hyperspectral Remote Sensing	Mrs. Shefali Agarwal
04 Sep 19	Wednesday	1600-1730 hrs	Advance Image classifier-OBIA ,fuzzy logic	-----
05 Sep 19	Thursday	1600-1730 hrs	Image Texture	-----
05 Sep 19	Thursday	Offline - as per computer lab availability Morning Session	Image Processing Hands-on and Practical Assignment	By University Coordinator
06 Sep 19	Friday	1530-1730 hrs	Panel Discussion/Query Session	Faculty

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

Module- 3 Geographical Information System Module/ Course Coordinator: Shri Prasun Kumar Gupta				
23 Sep 19	Monday	1600-1730 hrs	Introduction to GIS	Dr. Sameer Saran
24 Sep 19	Tuesday	1600-1730 hrs	Geographic Phenomena, Concepts and examples	Shri Prasun Kumar Gupta
25 Sep 19	Wednesday	1600-1730 hrs	Data Inputting and Editing in GIS	Shri K. Shiva Reddy
26 Sep 19	Thursday	1600-1730 hrs	GIS Data Models (Spatial and Non spatial)	Shri Ashutosh Kumar Jha
27 Sep 19	Friday	1600-1730 hrs	Map Projection Concepts & Use in RS & GIS	Dr. Ashutosh Srivastav
28 Sep 19		Saturday		
29 Sep 19		Sunday		
30 Sep 19	Monday	1600-1730 hrs	Spatial Analysis - Introductory Concepts and Overview	Shri Prabhhar Alok Verma
01 Oct 19	Tuesday	1600-1730 hrs	Spatial Analysis - Functionality and Tools	Shri Kapil Oberai
02 Oct 19			Mahatma Gandhi	
03 Oct 19	Thursday	1600-1730 hrs	Demo of QGIS Software – Session 01: Adding GIS Data, Attribute table & Identity tool Change symbology, Create map compositors Manage plugins, CRS & EPSG Geo-referencing & Tie-points, RMSE & Rectification	Recorded Lecture
04 Oct 19	Friday	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
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		Break	
10 Oct 19	Thursday	1530-1555hrs	Interactive Session of Demo of QGIS Software – Session 01 & Session 02	Shri Prasun Kumar Gupta
		1600-1730 hrs	Open Source Software Technology & Tools	Shri Prasun Kumar Gupta

11 Oct 19	Friday	1600-1730 hrs	Data Quality & Policies OGC, NSDI & GSDI initiatives. Discussion on Internet resources	Dr. Harish Karnatak
12 Oct 19	<b>Saturday</b>			
13 Oct 19	<b>Sunday</b>			
14 Oct 19	Monday	1600-1730 hrs	Advanced Geospatial Modeling	Shri Ashutosh Kumar Jha
15 Oct 19	Tuesday	1600-1730 hrs	Uncertainty in GIS and Error Propagation	Shri Hari Shankar
16 Oct 19	<b>Wednesday</b>	1600-1730 hrs	3D GIS, City Models and Applications	Dr. Sameer Saran
17 Oct 19	Thursday		BREAK	
18 Oct 19	Friday	1600-1730 hrs	Recent Trends in Geoinformatics	Dr. Sameer Saran
21 Oct 18		1600-1730 hrs	Panel Discussion of Module 3	All Faculty

Module-4 RS & GIS Applications				
Module/ Course Coordinator: Dr. C M Bhatt				
Date	Day	Time	Topic	Speaker
23 Oct 19	Wednesday	1600-1730 hrs	Space Technology & its applications in governance	Dr. S. K Srivastav
24 Oct 19	Thursday	1600-1730 hrs	Remote Sensing and GIS Applications in Soil Resource Assessment	Dr. Suresh Kumar
25 Oct 19	Friday	1600-1730 hrs	<b>Break</b>	
26 Oct 19	<b>Saturday</b>			
27 Oct 19	<b>Sunday</b>			
28 Oct 19	Monday	1600-1730 hrs	<b>Break</b>	
29 Oct 19	Tuesday	1600-1730 hrs	Remote Sensing Applications in Agriculture- Crop Inventory & Yield Forecasting	Dr. N.R. Patel
30 Oct 19	Wednesday	1600-1730 hrs	RS & GIS Applications in Forestry and Ecology	Dr. Hitendra Padalia
31 Oct 19	Thursday	1600-1730 hrs	RS & GIS Applications to Water Resources Management	Dr. S.P Aggarwal
01 Nov 19	Friday	1600-1730 hrs	Geology and Geomorphology	Dr. R.S. Chatterjee
<b>02 Nov 19</b>	<b>Saturday</b>		<b>Break</b>	
<b>03Nov 19</b>	<b>Sunday</b>		<b>Break</b>	
04 Nov 19	Monday	1600-1730 hrs	Space-enabled Products & Services for Disaster Management :Indian Initiatives	Dr. P.K.C.Ray
05 Nov 19	Tuesday	1600-1730 hrs	RS & GIS Application in Urban & Regional Planning	Shri. Pramod Kumar
06 Nov 19	Wednesday	1600-1730 hrs	RS applications for Planetary Studies	Dr. Prakash Chauhan
07 Nov 19	Thursday	1600-1730 hrs	RS & GIS for Coastal Zone Management	Dr. D. Mitra
08 Nov 19	Friday	1600-1730 hrs	Remote Sensing Application to Atmospheric & Marine Environment	Dr. A.K Mishra
<b>09 Nov 19</b>		<b>Saturday</b>		
<b>10 Nov 19</b>		<b>Sunday</b>		
11 Nov 19	Monday	1600-1730 hrs	Engineering Geology with emphasis on landslide studies	Dr. Shovan Chatteraj
<b>12 Nov 19</b>			<b>Break</b>	
13 Nov 19	Tuesday	1600-1730 hrs	Geospatial Technology for climate change studies	Dr. Arijit Roy
14 Nov 19	Thursday	1530-1630 hrs	Applications of Geo-web Services and mobile GIS in governance	Dr. Harish Karnatak
15 Nov 19	Thursday	1630 – 1730 hrs	Panel Discussion Module-3	All speakers

50<sup>th</sup> 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 Course no 51<sup>th</sup>, 52<sup>th</sup>, 53<sup>th</sup> and 54<sup>th</sup> course**

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