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Govt. of India
Department Space
Indian Space Research Organization
Indian Institute of Remote Sensing

One Hundred Sixty-Four IIRS Outreach Programme
On
Basic of RS, GIS & GNSS

Tentative Course Schedule

S. No.	Course Name	Module Name	From	To
1.	Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System	Complete Basic Course	31-08-2026	27-11-2026
2.	Remote Sensing and Digital Image Analysis	Module-1	31-08-2026	25-09-2026
3.	Overview of Global Navigation Satellite System	Module-2	28-09-2026	09-10-2026
4.	Overview of Geographical Information System	Module-3	12-10-2026	06-11-2026
5.	Overview of Geocomputation and Geo-web services	Module- 4	09-11-2026	13-11-2026
6.	RS & GIS Applications in Natural Resource Management	Module-5	16-11-2026	27-11-2026

Course Name: Remote Sensing & Digital Image Analysis

Course Id: 190

Course Coordinator: Mrs. Minakshi Kumar

Duration of the Course: 31-08-2026 to 25-09-2026

Date	Day	Time	Topic	Speaker
31.08.2026	Monday	1600-1730 hrs	Basic Principles of Remote Sensing	Dr. Manu Mehta
01.09.2026	Tuesday	1600-1730 hrs	Spectral Signatures of Different Land cover Features and Visual Image interpretation	Dr. Hina Pande
02.09.2026	Wednesday	1600-1730 hrs	Earth Observation Sensors and Platforms	Mr. Vinay Kumar
03.09.2026	Thursday	Offline	RS and Image Interpretation Practical	Offline
04.09.2026	Friday		Janmashthami	
05.09.2026	SAT			
06.09.2026	SUN			
07.09.2026	Monday	1600-1730 hrs	Digital Image Processing: Basic Concepts Rectification and Registration	Ms. Minakshi Kumar
08.09.2026	Tuesday		Image Enhancement techniques	Dr. Poonam S. Tiwari
09.09.2026	Wednesday	1600-1730 hrs	Break	
10.09.2026	Thursday	1600-1730 hrs	Image Classification Techniques	Dr. Anil Kumar
11.09.2026	Friday		Break	
12.09.2026	SAT			
13.09.2026	SUN			
14.09.2026	Monday	1600-1730 hrs	Accuracy Assessment and Digital Change Detection	Dr. Anil Kumar
15.09.2026	Tuesday	1600-1730 hrs	Image Processing Hands-on Demo using QGIS	Mr. Prasun Kumar Gupta
16.09.2026	Wednesday	1600-1730 hrs	BREAK	
17.09.2026	Thursday	1600-1730 hrs	Thermal Remote Sensing	Dr. Shashi Kumar
18.09.2026	Friday	offline 1600-1730 hrs	Image Processing QGIS- hand-n Self Practice	Offline
19.09.2026	SAT			
20.09.2026	SUN			
21.09.2026	Monday	1600-1730 hrs	Hyperspectral Remote Sensing	Mr. Vinay Kumar
22.09.2026	Tuesday	1600-1730 hrs	Open Source Data and International Geoportals for Satellite data download	Dr. Harish Karnatak
23.09.2026	Wednesday	1600-1730 hrs	Basics of Microwave Remote Sensing	Dr. Shashi Kumar
24.09.2026	Thursday	1600-1730 hrs	Basics of SAR Data Processing	Mr. Ashish Joshi
25.09.2026	Friday	1600-1730 hrs	Basics of UAV Remote Sensing	Mrs. Shefali Agrawal

Module- 2: Global Navigation Satellite System
Course Id: 192
Module/ Course Coordinator: Dr. Ashutosh Bhardwaj

Course Duration: 28-09-2026 to 09-10-2026

Date	Day	Time	Topic	Speaker
28-09-2026	Monday	1600-1730 hrs	Satellite Navigation*- I	Dr. Ashutosh Bhardwaj
29-09-2025	Tuesday	1600-1730 hrs	Satellite Navigation*- II	Dr. Ashutosh Bhardwaj
30-09-2025	Wednesday	1600-1730 hrs	GPS receivers, processing methods, errors and accuracy	Dr. Ashutosh Bhardwaj
01-10-2025	Thursday	1600-1730 hrs	Satellites based Augmentation systems & GPS Aided and GEO Augmented Navigation (GAGAN)	Dr. Ashutosh Bhardwaj
02-10-2026	Friday		Mahatma Gandhi's Birthday (G)	
03-10-2025	SAT			
04-10-2026	SUN			
05-10-2026	Monday	1600-1730 hrs	BREAK	
06.10.2026	Tuesday	1600-1730 hrs	GPS signal characteristics, Data formats (broadcast, precise ephemeris)	Dr. Ashutosh Bhardwaj and Sh. Ashish Joshi
07.10.2026	Wednesday	1600-1730 hrs	Indian Regional Navigation Satellite System (IRNSS)	Dr. Ashutosh Bhardwaj and Dr. Kamal Pandey
08.10.2026	Thursday	1600-1700 hrs	Advance GNSS processing	Dr. Suresh Kannaujiya
09.10.2026	Friday		DGPS demonstration (Pre-recorded)	Offline
			Live query session	All Faculty
10.10.2026	SAT			
11.10.2026	SUN			

Module- 3: Geographical Information System**Course Id: 194****Course Coordinator: Dr. Vandita Srivastava****Module Coordinator: Shri. Prabhakar Alok Verma****Course Duration: 12-10-2026 to 06-11-2026**

Date	Day	Time	Topic	Speaker
12.10.2026	Monday	1600-1730 hrs	Overview of GIS	Dr. Vandita Srivastava
13.10.2026	Tuesday	1600-1730 hrs	Geographic Phenomena, Concepts and examples	Mr. Prasun Kumar Gupta
14.10.2026	Wednesday	1600-1730 hrs	Map Projection Concepts & Use in RS & GIS	Dr. Ashutosh
15.10.2026	Thursday	1600-1730 hrs	GIS Data Models (Spatial and Non spatial)	Mr. Ashutosh Kumar Jha
16.10.2026	Friday	1600-1730 hrs	Data Inputting and Editing in GIS	Mr. Prabhakar Alok Verma
17.10.2026	SAT			
18.10.2026	SUN			
19-10-2026	Monday	Dussehra BREAK		
20-10-2026	Tuesday			
21-10-2026	Wednesday			
22-10-2026	Thursday			
23.10.2026	Friday			
24.10.2025		SAT		
25.10.2026		SUN		
26.10.2026	Monday	1600-1730 hrs	Spatial Analysis – Introduction	Dr. Vandita Srivastava
27.10.2026	Tuesday	1600-1730 hrs	Spatial Analysis (Vector & Raster)	Dr. Vandita Srivastava
28-10-2026	Wednesday	1600-1730 hrs	BREAK	
29.10.2026	Thursday	1600-1730 hrs	Open Source Software Technology & Tools	Mr. Prasun Kumar Gupta
30.10.2026	Friday	1600-1730 hrs	Overview of Spatial Data Quality	Dr. Ashutosh
31.10.2026			SAT	
01-11-2026			SUN	
02-11-2026	Monday	1600-1730 hrs	Uncertainty in GIS and Error Propagation	Mr. Prabhakar Alok Verma
03-11-2026	Tuesday	1600-1730 hrs	Network Analysis	Mr. Ashutosh Kumar Jha
04-11-2026	Wednesday	1600-1730 hrs	Map Visualisation	Mr. Ashutosh Kumar Jha
05-11-2026	Thursday	1600-1730 hrs	Overview of Big Data Analytics	Mr. Kapil Oberai
06-11-2026	Friday	1600-1730 hrs	Recent Trends in Geoinformatics	Mr. Kapil Oberai
07-11-2026			SAT	
08-11-2026			SUN	

Module Name- Overview of Geocomputation and Geo-web services

Course Id: 195

Module/ Course Module/Course Coordinator: Dr. Kamal Pandey

Course Duration 09-11-2026 to 13-11-2026

Date	Day	Time	Topic	Speaker
09-11-2026	Monday	1600-1730 hrs	Introduction to Geocomputation, Online GIS and Geo-web services Interactive Session	Dr. Harish Karnatak
10.11.2026	Tuesday	1600-1730 hrs	Open Geodata Repositories & ISRO Geoweb Services for thematic applications Interactive Session	Dr. Kamal Pandey
11.11.2026	Wednesday	1600-1730 hrs	Programming concepts for Geo-computation - Introduction to Python and R Interactive Session	Mr. Ravi Bhandari
12.11.2026	Thursday	1600-1730 hrs	Overview of WebGIS and application development Interactive Session	Dr. Kamal Pandey
13.11.2026	Friday	1600-1730 hrs	Demonstration on Introduction to Cloud based geospatial data processing Interactive Session	Mr. Ravi Bhandari

Module/Course Name- RS & GIS Applications in Natural Resource Management

Course ID: 196

Module/ Course Coordinator: Dr. Subrata Nandy

Course Duration: 16-11-2026 to 27-11-2026

Date	Day	Time	Topic	Speaker
16.11.2026	Monday	1600-1730 hrs	RS & GIS Applications in Coastal Zone Management	Dr. D. Mitra
17.11.2026	Tuesday	1600-1730 hrs	RS & GIS Applications in Atmospheric Studies	Dr. Yogesh Kant
18.11.2026	Wednesday	1600-1730 hrs	RS and GIS Applications in Soil Resource Management	Dr. Suresh Kumar
19.11.2026	Thursday	1600-1730 hrs	RS & GIS Applications in Crop Resource Assessment and Monitoring	
20.11.2026	Friday	1600-1730 hrs	RS & GIS Applications in Forestry and Ecology	Dr. Hitendra Padalia
21.11.2026	SAT			
22.11.2026	SUN			
23.11.2026	Monday	1600-1730 hrs	RS & GIS Application in Urban & Regional Planning	Dr. Sandeep Maithani
24.11.2026	Tuesday	1600-1730 hrs	RS & GIS Applications in Water Resources Management	Dr. Praveen Thakur
25.11.2026	Wednesday	1600-1730 hrs	RS & GIS Applications in Geological studies	
26.11.2026	Thursday	1600-1730 hrs	RS & GIS Applications in Disaster Mitigation & Management	Dr. Arijit Roy
27.11.2026	Thursday	1600-1730 hrs	Planetary Remote Sensing	Dr. Mamta Chauhan

Note: Details about the course, examination and latest schedule will be updated on below link;

<https://www.iirs.gov.in/> or <https://www.iirs.gov.in/EDUSAT-News>

Examination Schedule

Sl No.	Course Name	Course id	Examination date
1.	Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System	189	03 rd & 04 th December 2026