

**INDIAN INSTITUTE OF REMOTE SENSING**  
(IIRS/ISRO)  
DEHRADUN

**MASSIVE OPEN ONLINE COURSE (MOOC)**

**Course Title:** Remote Sensing & GIS for Urban Studies and Environmental Modeling

**Duration:** July 6, 2022- August 5, 2022 (Approximately 10 hours )

**Target Group:** The course is designed for Professionals engaged in Urban & Regional Planning; Students & Researchers of Urban & Regional Planning, Geography, Environmental Studies, Civil Engineering, Architecture, OR equivalent qualification/ specialization.

S. No.	Topic	Faculty	Duration
1	Overview of Geospatial Applications in Urban & Regional Planning	Dr. Pramod Kumar	20 to 60 min.
2a	Elements and Characteristics of Master Plan	Dr. Sandeep Maithani	
2b	Concepts and Components of Smart Cities	Dr. Pramod Kumar	
3a	Base Map and Urban Land Use	Dr. Kshama Gupta	
3b	Concepts of Cadastral Mapping	Dr. Kshama Gupta	
4	Urban Sprawl and Growth Modelling	Dr. Sandeep Maithani	
5	Assessment of Urban Green Spaces	Dr. Kshama Gupta	
6	3D City Modelling for Urban Planning	Dr. Kshama Gupta	
7	Close Range Photogrammetry for Urban Heritage Studies	Dr. Poonam Seth Tiwari	
8	Urban Land Surface Temperature Studies	Ms. Asfa Siddiqui	
9	Urban Utilities and Spatial Analysis	Dr. Pramod Kumar	
10	Urban Seismic Risk Assessment	Dr. Sandeep Maithani	
11	Urban Flood Risk Assessment	Dr. Pramod Kumar	