

Short Term Course (STC)
on
Introduction and Application
of
GIS and Remote Sensing
in
Water Resources Engineering

(GISWRE - 2023)

April 03 - 07, 2023



Organized by

Centre for Geographic information systems
National Institute of Technology Kurukshetra
Haryana, India

GISWRE-2023 FLYER

Essentials of GIS combines key concepts underlying the technology with practical concerns and real-world applications. GIS is also used to ask questions, inform decisions, and guide policy extending from the melting of the polar ice caps to privacy concerns associated with mapping.

GIS is a multi-component environment used to create, manage, visualize and analyze data and its spatial counterpart. The ability of GIS to express information in an easily understandable manner can increase public awareness and participation in decision-making processes.

Recognizing that many potential GIS users are non-specialists or may only require a few maps, this STC intends to provide basic knowledge to new users.

STC Objectives:

The STC will deliver the key concepts among participants (Faculty, Industry Professionals, PhD. /PG Scholars, etc.) with the aim

- To introduce the basic concepts of GIS and Remote sensing
- To familiarize the need of various types of data required
- To familiarize rainfall-runoff, groundwater & sediment yield modeling.
- To familiarize google earth engine and its application in WRE
- Hands-on training on above using Arc GIS software

Mode of STC:

STC will be in physical mode, where each participant has to be physically present at STC Venue for each session. Experts will engage the sessions in physical mode. The sessions are planned to be delivered using both Theoretical as well as Hands-on training on relevant topics using Arc GIS software.

Preamble: Large volumes of geographic data and technology innovation have been combined to transform the static map into dynamic and interactive multimedia. Geographic information systems (GIS) are the primary technology that underpins this integration and, consequently, the maps of the twenty-first century. Information is vital in reducing uncertainty, evaluating alternatives courses of action and revealing new avenues. Availability of right information at the right time to right person and at the right cost is a crucial factor in decision making.

In today's world, learning involves knowing how and where to search for information. In some respects, knowing where to look for answers and information is arguably just as important as the knowledge itself. GIS is a unique kind of information technology that combines data and information from numerous sources. The word "where" has acquired new significance as a result of this integration and mapping. GIS offers insights into everyday chores and the major concerns of the future, from receiving directions to a new place in your city on your mobile device to investigating what will happen to coastal cities if ocean levels rise due to global warming, etc

For Any Query:

cgis@nitkkr.ac.in

Our Experts

- **V. S. Arya**
Former Director, Haryana Space Application Centre, Hisar
- **S. K. Jain**
Scientist G, National Institute of Hydrology, Roorkee
- **V. Singh**
Scientist C, National Institute of Hydrology, Roorkee
- **Shrey Pathak**
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- **P. Chand**
Assistant Professor, Central University of Punjab, Bhatinda
- **A. K. Prabhakar**
Assistant Professor, National Institute of Technology, Kurukshetra
- **Mahesh Pal**
Prof., National Institute of Technology, Kurukshetra
- **K. K. Singh**
Prof., National Institute of Technology, Kurukshetra

Course Fee

Students/Research Scholars	Fee Rs. 1000/-
Academicians/Faculty Members	Fee Rs. 3000/-
Professionals/Industry Persons	Fee Rs. 6000/-

Last date of STC
Registration

20 March, 2023 (5:00 pm)

GISWRE-2023 FLYER

Organizing Team

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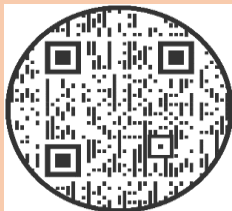
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General Instructions

The interested participants are advised to complete the registration process using link or QR code below by March 20, 2023

https://docs.google.com/forms/d/e/1FAIpQLSeF7cgE1rsQyV076bGrizDdEzIkiM-FcG3V_e3teqQw3V-MA/viewform?usp=sf_link



As seats are limited, only selected participants will be communicated through email for deposition of the course fee.



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CGIS NIT KKR

Center for CGIS

The Centre was established in January 2020 so that professionals working in Civil and other branches of engineering can successfully apply GIS knowledge in modeling of various types of engineering solutions which require georeferenced maps, viz. digital elevation model, soil map, land use and land cover map, road/canal networks, smart city development etc., precisely with global coordinate points of the earth. CGIS also helps in imparting knowledge to the under graduate (UG), post graduate (PG) students and faculty/ industry professionals. B. Tech students having projects in their final year are also utilizing the facilities of the Centre. The M. Tech students and Ph.D. scholars of various departments/schools are using GIS facilities to complete their Thesis/Dissertation.

Research and Consultancy Works

Many faculty members are taking up research and consultancy works using the facilities of CGIS.

Training and Internships

CGIS has been organizing various training programs in capacity building of GIS Professionals. B. Tech students having internships in 3rd year are also utilizing the facilities of the Centre.



National Institute of Technology, Kurukshetra

National Institute of Technology, Kurukshetra is one of the 31 NITs in the country. It is a premier center of learning and research in various disciplines of Engineering and Management. It trains and develops high caliber professionals to serve not only the country but also the world at large. Established in 1963 as an REC, the college was elevated to a National Institute with Deemed University status in June 2002. The Institute has made rapid strides in expanding and upgrading facilities, enhancing the quality of education and strengthening the linkage with industry. The Institute has B.Tech, M.Tech, MBA and MCA Courses in various disciplines. Institute also offers excellent facilities for advanced research in the emerging areas of Science and Technology leading to Ph.D. degree.

The institute has well qualified and dedicated faculty along with finest supporting staff, laboratories and other infrastructure. The syllabus and the curriculum are constantly being updated to meet the growing demands and need of the day in different areas of technology. The infrastructure is geared to enable the Institute to turn out technical personnel of a high quality.