

About Kurukshetra

Kurukshetra is a place of great spiritual significance deeply steeped in history and mythology where Lord Krishna delivered the divine message of "Shrimad Bhagwad Gita". It is one of the premier centre of pilgrimage attracting devotees in a steady stream all-round year. Kurukshetra is very well connected by Rail (Delhi-Karnal-Ambala section), by Road (NH44 which connects Delhi-Chandigarh-Amritsar-Jammu) and by Air (Delhi 160 Km and Chandigarh 80 Km). The NIT Campus is about 10 km from Pipli situated on NH44 and about 5 km from Kurukshetra railway station.

About National Institute of Technology Kurukshetra (NITKKR) (Institution of National Importance)

NITKKR(formerly known as Regional Engineering College, Kurukshetra in 1963) was conferred upon the status of Institution of National Importance on June 26, 2002. The Institute has B.Tech., M.Tech., MBA, M Sc. and MCA courses in various disciplines with annual intake of about 1500 students. 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 splendid supporting staff, laboratories and other infrastructure. The infrastructure is geared to enable the institute to produce technical personnel of high quality.

About the Civil Engineering Department (CED), NITKKR

Department of Civil Engineering is a pioneering department of the Institute. Over the years, the

department has progressed at rapid pace with development in the spheres of infrastructure facilities and academic programs. The department has experienced faculty and well-equipped laboratories in allied specialization fields. The aim of the department is to attain the status of leading world-class centers for teaching and research, responsive to changing needs of industry with emphasis on innovation, technological development, entrepreneurial and leadership competencies, professional and human values and socio-economic uplifting of the community.

Chief Patron

Prof. B V Ramana Reddy, Director, NITKKR

Patron

Prof. Arun Goel, HOD, CED, NITKKR

Convener

Prof. K.K. Singh

Course Coordinator(s)

Dr. Ajay Krishna Prabhakar

Dr. Dheeraj Kumar Sharma

Important Dates

Last date of Registration: Oct 09, 2024

Duly filled Registration form along with the Registration Fee should reach

via email: stcakp@gmail.com

For any query, please contact:

+91-7206550843, +91-9897715970



5 Days

Short Term Course

(Online Mode)

On

Flood Modeling using HEC-RAS and

GIS (FMHRG-2024)

(Oct 10 – Oct 14, 2024)

**Department of Civil Engineering
National Institute of Technology
Kurukshetra-136119,
Haryana, India**

Course Objectives

Floods are among the most devastating disasters in terms of socio-economics and casualties. However, these natural disasters can be managed and their effects can be minimized by flood modeling performed before the occurrence of a flood. Flood hazard and risk maps were prepared by using GIS and HEC-RAS. In recent years, the integrated use of geographic information systems (GIS) with hydrological and hydraulic modeling has significantly improved numerical flood modeling. The HEC-GeoRAS, a tool of HEC-RAS, uses mathematical equations to calculate river bed coefficients based on river water flow rate, the amount of drainage, and the rate at which water enters the soil. Flood modeling is a technical method for obtaining high-accuracy information regarding important flood factors such as runoff, storage, and velocity. In this course, flood modeling using GIS and HEC-RAS will be covered in detail and hands-on problems will be discussed.

Course Contents

- Basics of GIS and HEC-RAS
- Data extraction using Python
- Open data sources for water resources development and management
- Introduction to hydrologic modeling and its role in flood management.
- Floodplain mapping and analysis using HEC-RAS
- Application of HEC-RAS for flood risk assessment and management

Tentative Resource Persons

- Dr. Shray Pathak, Indian Institute of Technology (IIT) Ropar
- Dr. Arun Mondal, Assistant Professor, University of Allahabad, Prayagraj, U.P
- Dr. Surendra Kumar Chandniha, Assistant Professor, BRSM & Research Station, Mungeli, Pin-495334, Chhattisgarh
- Dr. Harinarayan Tiwari, Managing Director, Floodkon, NOIDA
- Dr. Dheerej Kumar Sharma, Assistant Professor, NIT Kurukshetra
- Dr. Ajay Krishna Prabhakar, Assistant Professor, NIT Kurukshetra
- Dr. K K Singh, Professor, NIT Kurukshetra

Who should attend

Faculty members/research scholars / PG students from academic institutes approved by the AICTE /UGC /MHRD and Scientists / Engineers working in private / Public/ Govt. organizations/industries etc. can attend the course.

S. No.	Participants Category	Course Fee (Rs.)
1.	Research Scholars/Students	1000
2.	Faculty members	2000
3.	Industry/R&D/Govt. Org. professionals	5000

How to apply online

Click: <https://forms.gle/65A8ZbJ7Dbk74kwU9>

Instructions for registration fee

1. Go to SBI Collect or click on <https://www.onlinesbi.sbi/sbicollect>
2. Select Educational Institution
3. Select Haryana
4. Select Director National Institute of Technology, Kurukshetra
5. Select FMHRG-2024
6. Make the payment and collect the receipt

REGISTRATION FORM

5 Days Short Term Course (Online Mode)

On

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(Oct 10 – Oct 14, 2024)

Name: _____

Date of Birth: _____

Designation: _____

Organization: _____

Address for correspondence: _____

Phone: _____

E-mail: _____

Qualifications: _____

Registration Fee Payment Details _____

(Signature of applicant)

Signature of Head of Department/School/Institute