



ABOUT THE INSTITUTE

National Institute of Technology (NIT), Rourkela, was founded as Regional Engineering College, Rourkela, in 1961. It is a prestigious Institute with a reputation for excellence at both undergraduate and postgraduate levels, fostering the spirit of national integration among the students, close interaction with industry and a strong emphasis on basic and applied research. It has been consistently ranked within the TOP 20 engineering institutes for five consecutive years as per MHRD's NIRF Ranking, Govt. of India

Website: www.nitrkl.ac.in



About the Department

The Department of Civil Engineering Started its journey in 1961. Ever since the inception, it has been imparting quality education to undergraduate Students. The department presently Fosters four PG courses. There are about a dozen laboratories with various research and testing facilities. The faculty consists of eminent specialists from diverse fields, and there is a commendable research ambience in the department.

Patron

Prof. K. Umamheshwar Rao,
Director, NIT Rourkela

Chairperson

Prof. Suresh Prasad Singh
Head, Civil Engineering Department,
NIT Rourkela

Convenors

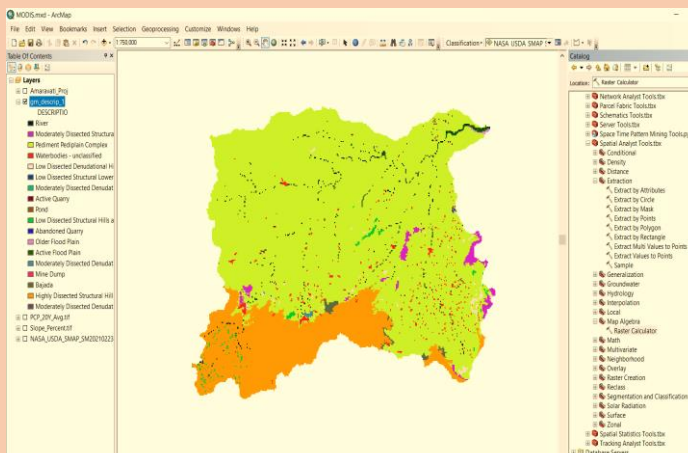
Dr. Ratnakar Swain
Dr. Jatin Anand
Dr. Sanat Nalini Sahoo



A 5-Day Workshop on Computer Applications in Water Resources Engineering (CAWRE-2024)

(31 May-4 June 2024) (HYBRID MODE)

Department of Civil Engineering,
National Institute of Technology,
Rourkela



ABOUT CAWRE-2024

CAWRE is an excellent platform for students, researchers, faculties, industry persons, professionals, and Hydrologists to gain knowledge on applications of different computational tools in Water Resources Engineering. Only theoretical knowledge is not sufficient to work in real-field problems. Therefore, this workshop/training mainly focuses on hands-on training on different computational tools for field applications related to water resources engineering. Watershed delineation, LULC map preparation, remote sensing application, satellite image processing, River profile study, Rainfall-runoff simulation, Sediment yield prediction, Non-point source nutrient load estimation, Stormwater management, groundwater recharge estimation and Shoreline erosion & accretion analysis are such areas of Water resources engineering, which require a thorough knowledge of relevant software and their working. Thus, the main objective of the proposed workshop is hands-on training on some of the essential software used in Water Resources Engineering.

OBJECTIVES

The course is designed for students, academicians, research scholars, industry professionals and scientists in Water Resources Engineering. The prime objective of the course is to provide hands-on training on solving field problems in areas of Water Resources Engineering using different computational tools.

COURSE CONTENT

- ❖ Technical background in ArcGIS, QGIS-MOLUSCE, SWAT, SWMM, DSAS models.
- ❖ Watershed Delineation and extraction of morphometric parameters.
- ❖ Preparation of the Index map of the study area.
- ❖ Shapefile preparation.
- ❖ Land Use and Land Cover (LULC) mapping.
- ❖ Rainfall-runoff Simulation.
- ❖ Sediment yield estimation.
- ❖ Nutrient load Analysis
- ❖ Urban drainage system management
- ❖ Shoreline Erosion & Accretion analysis.

IMPORTANT DATES

Last date for registration	20 th May 2024
Confirmation mail	25 th May 2024
Workshop dates	31 st May-4 th June 2024

Convenors

Dr. Ratnakar Swain, Asst. Professor

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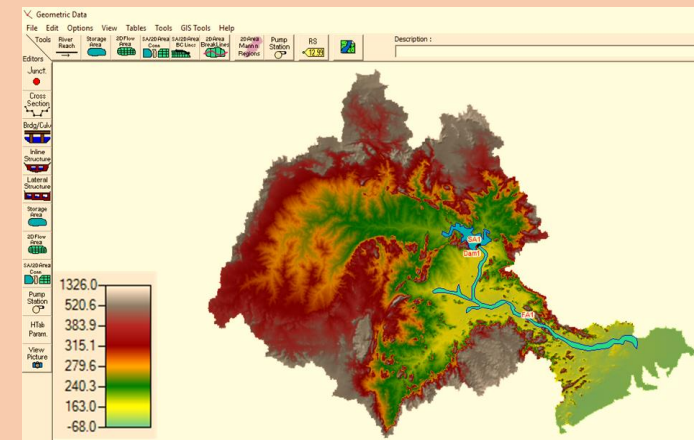
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Department of Civil Engineering, NIT Rourkela



REGISTRATION

The participant can register in the google form <https://forms.gle/WtuAGzEC6xQY34K16>

Registration Fee

For online participants	2000/-
For offline participants	6000/-

Study material and certificate will be provided to all participants.

ACCOMMODATION

Free hostel accommodation and food will be provided to offline participants.

Registration fee can be paid online via NEFT/RTGS/IMPS using the following information:

Name: CONTINUING EDUCATION NIT ROURKELA

A/C No.: 10138951784

Bank: State Bank of India

Branch: NIT Campus Rourkela

IFSC Code: SBIN0002109

For more Information, visit

<https://sites.google.com/view/cawre-2024/home>