

## PMRF-ISSS Teaching Programme

Prime Minister Research Fellowship students' teaching requirement facilitated by the Institute of Smart Structures and Systems



## Module PMRF-ISSS66/2023

## Hydrological Modelling with R

Name of the PMRF student

### Kanneganti Bhargav Kumar

#### Required background of the students taught

B.Tech: Civil Engineering

M.Tech/Ph.D: Hydrology /Water

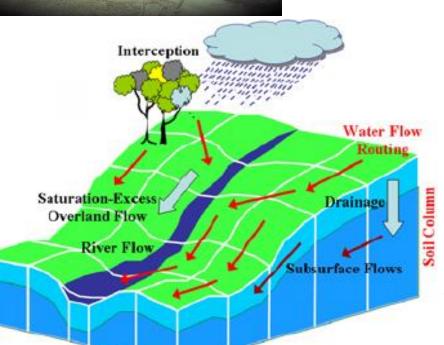
Resources/other similar disciplines

(Require Basic Knowledge on Hydrology)

#### **Online session Coordinator**

Will be chosen from the list of registrants

# Hyd Rology



Details of the content of the module

#### 1. Introduction To R Programming

- I) Installation
- ii) Data Types
- iii) Basic Functions
- iv) Data Collection using R functions
- V) Data Pre-processing (QA)

#### 2) Hydrologic Modelling With R

- I) Introduction to Hydrologic Modelling Packages in R
- ii) Calibration and Validation
- iii) Modelling Analysis With Topmodel
- iv) Interactive Plotting of Model Results with hydroTSM tool

The Course Will Focus on Application-oriented R Learning and Step-by-Step Coding Procedure.

Schedule of the module

Start Date: 9 December 2023

**End Date: 17 December 2023** 

Class Timings: Saturday and Sunday (10:00-13:00

and 14:30-17:30)

Meeting link: Will be shared later

Contact email ID: <a href="mailto:isss.forum@gmail.com">isss.forum@gmail.com</a>

Registration link: <u>Hydrological Modelling</u>

with R