

SPONSORSHIP

Prof./Dr./Mr./Ms./Mrs./_____ is an employee of our institute. The applicant will be permitted to attend the short-term course on "Hydrologic-Hydraulic Modeling of Flash Flood" at IIT Madras during March 18 - 22, 2019, if selected.

.....
(Signature of Sponsoring Authority with date and seal)

Demand Draft (DD) of Rs. 500/- as caution-money:

DD No.:

Date:

Bank:

(Signature of the Applicant)

The duly sponsored application form should be posted to:

Dr. Soumendra Nath Kuiry
Assistant Professor
Environmental and Water Resources Engineering
Dept. of Civil Engineering
IIT Madras, Chennai - 600036
E-mail: snkuiry@iitm.ac.in

Note: Please email us a soft copy of your duly filled application followed by hard copy of the same to the address mentioned above.



ELIGIBILITY & REGISTRATION FEE

The course is open to faculty with background in Civil Engineering, Ocean Engineering, Mechanical Engineering and Applied Mathematics from AICTE approved engineering colleges. No course fee is charged for participants sponsored by AICTE approved institutions. However, a DD for Rs 500/- has to be sent by the provisionally selected participants as caution deposit.

All payment is to be made by demand draft drawn on any nationalized bank in favor of **Registrar, IIT Madras** payable at **Chennai**. Limited number of participants from AICTE recognized engineering institutions will be eligible for to and fro railway fare via the shortest route in 3-Tier AC class. Candidates attending the course till its completion will only be eligible for travelling allowance.

IMPORTANT DATES

Last date for applications : Feb 25, 2019
Intimation of selection (through email) : Feb 26, 2019
Confirmation of participation : Mar 1, 2019

Important Links

Center for Continuing Education, IIT Madras

<http://cce.iitm.ac.in>

Department of Civil Engineering, IIT Madras

www.civil.iitm.ac.in

Course coordinators Profile

Dr. Soumendra Nath Kuiry

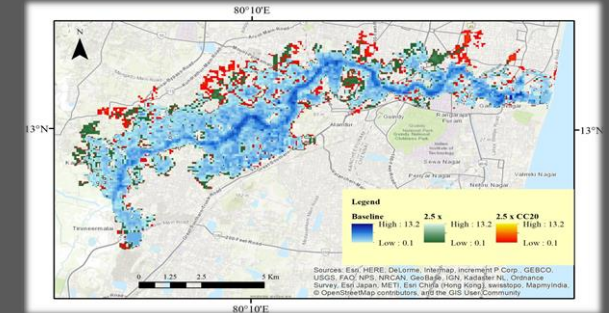
http://www.civil.iitm.ac.in/new/?q=kuiry_edu

Dr. Balaji Narasimhan

http://www.civil.iitm.ac.in/new/?q=balaji_edu

AICTE QIP SHORT TERM TRAINING PROGRAMME

HYDROLOGIC-HYDRAULIC MODELING OF FLASH FLOOD



(Sponsored by AICTE, New Delhi)

March 18 - 22, 2019



Co-ordinators

Dr. Soumendra Nath Kuiry
Dr. Balaji Narasimhan

Organized by

Department of Civil Engineering
Indian Institute of Technology Madras,
Chennai - 600036, India.

BACKGROUND

Floods are natural phenomena that arise as a result of extreme precipitation condition. The recent 2015 Chennai flood event claimed many lives and incurred an economic loss of \$2.2 billion. Encroachment of wetlands, flood-plains and water bodies like tanks and lakes drastically alter the drainage characteristics, owing to loss of natural flood storage and drainage. As a consequence, the coastal cities have become far more vulnerable to flooding. Also, there is an overwhelming consensus that the increase in temperature due to global climate change is resulting in the increase in intensity of heavy precipitation events. The global temperature is also going to increase the extreme events such as storms and floods in future. Therefore, comprehensive emergency action plan and disaster management are required in order to reduce risk of lives and damage of properties. In this direction, non-structural measures such as flood warning system, flood zoning and hazard maps may help to a great extent. All these measures can be achieved through hydrologic study of the upper catchment of the target region and hydraulic study of flood wave propagation. Hence, the objectives of the short term course are set as follows:

- Hydrologic study of rainfall-runoff using lumped and distributed models
- Hydraulic study of flood wave propagation
- Interlinking of two models to generate flood zoning and hazard maps.

COURSE CONTENTS

Fundamentals

- ❖ Introduction to QGIS
- ❖ Preparation of digital elevation model
- ❖ Delineation of watershed and stream network
- ❖ Hydrologic and hydraulic flood routing
- ❖ Rainfall distribution
- ❖ Introduction to numerical methods

Practice sessions

- ❖ Hands on training on HEC-HMS, MGB-IPH and HEC-RAS models through example problems.
- ❖ Case studies: Chennai flood (2015) in Adyar Basin.

RESOURCE PERSONS

The teaching faculty will constitute experts from different fields of specializations within IIT Madras and guest speakers from other reputed institutions and organizations.

COURSE MATERIAL

Each registered participant will be provided with a set of comprehensive lecture notes.

BOARDING AND LODGING

Boarding and lodging facilities will be provided for the selected candidates in the Taramani guesthouse at IIT Madras. Accommodation will be on *sharing* basis.

AICTE SHORT TERM TRAINING PROGRAMME

HYDROLOGIC-HYDRALIC MODELING OF FLASH FLOOD

(MARCH 18-22, 2019)

Application Form

- **Name:** _____
- **Designation:** _____
- **Department:** _____
- **Organization:** _____
- **Mailing Address:** _____

• **Pin code:** _____ **Phone No.:** _____

• **Fax No.:** _____ **Mobile No.:** _____

• **E-mail:** _____

• **Highest Academic Qualification :** _____

• **Specialization:** _____

• **Research Area:** _____

• **Purpose of attending this workshop:** _____

• **Experience (in years)**

(a) **Teaching:** _____ (b) **Industrial/Research:** _____

• **Accommodation***

(a) **Required:** _____ (b) **Not Required:** _____

(* No accommodation for the local participants)

All data provided above are true to the best of my knowledge and belief. Kindly register me for the short-term course on “Hydrologic-Hydraulic Modeling of Flash Flood” to be held at IIT Madras.

Place: _____

Date: _____ **(Signature of the applicant)**

