

**ATAL ACADEMY CELL, NEW DELHI**  
**SPONSORED**  
**SHORT TERM TRAINING PROGRAMME**

on

**ADVANCES IN FLOOD MODELING**

*9<sup>th</sup> to 13<sup>th</sup> December, 2019*

Co-ordinator

**Dr. Sanjay M. Yadav**

Professor

Water Resource Engineering Section

Civil Engineering Department

Organized by:



**Department of Civil Engineering,**  
**Sardar Vallabhbhai National Institute of Technology,**  
**Ichchhanath, Surat – 395007, Gujarat, India**

### About Surat:

Surat is a top ranking industrial city in the country with clean wide roads. It is well known worldwide for textiles, Zari and Diamond industries. Several large-scale industries and establishments are located in the city. Surat is situated on the main western railway route between Vadodara and Mumbai. The institute is located at Ichchhanath on Surat-Dumas road at a distance of about 9 km from Surat railway station. Being a coastal city and on the bank of the Tapi River, the weather is good around the year. The average minimum and maximum temperature during December are 31.5°C and 16.5°C. By auto, it may cost from Surat railway station to SVNIT @ Rs. 100-120 during daytime.

### About the Institute:

The institute was initially established as Sardar Vallabhbhai Regional College of Engineering & Technology in 1961 and was upgraded as a National Institute of Technology on 4th October 2002. Sardar Vallabhbhai National Institute of Technology (SVNIT) is one of the pioneering engineering institutions of the country which has contributed many outstanding engineers in India and abroad. It is conducting six UG programs, seventeen PG programs, five years integrated M.Sc. programs and PhD program in all disciplines of engineering and applied sciences. Special attention is also given to interdisciplinary researchers. The institute has an excellent placement record and growing by high pace in research as well as consultancy.

### About the Department:

The Department of Civil Engineering is one of the pioneering departments of the Institute. The department has highly qualified faculty members engaged in teaching, research and development with the aim of achieving excellence in their fields. Department offers Post Graduate and Doctoral Programs in the following areas:

1. Water Resources Engineering
2. Environmental Engineering
3. Transportation Engineering and Planning
4. Urban Planning

The major strength of the department is due to its multidisciplinary activities like R&D, Consultancy, and Testing etc.

### **Objective of the Programme:**

The course introduces the participants to the recent advances in flood modelling. The course intends to cover nature and characteristics of floods, introduction to 1D-2D flood modelling, flood forecasting, and early warning system through case studies. Hands-on practice will be imparted during the workshop.

The course is designed for, postgraduate students, graduate students, research scholar, academician and practicing engineers. The horizon of the course extends from basin of flood modelling to latest real-time flood forecasting.

### **Course Content:**

The course intends to cover the following topics.

- Nature and characteristics of floods.
- Introduction to 1D-2D Flood Modelling.
- Hydrology and Hydraulic flood modeling
- Remote sensing and GIS application.
- Flood forecasting and early warning system.
- Introduction to tools such as Mike II, HEC-RAS, Arc GIS, RAS Mapper etc.
- Case Studies
- Hands on Session

### **Resource Persons:**

Resource persons may be invited to share their respective expertise in river flood analysis and modelling from premier institutes, organizations like IIT, NIT, CWC, WAPCOS, IMD and consultants.

### **Eligibility for Participants:**

Faculty of AICTE approved Engineering College / Institute, Government Engineers, Field engineers, Consultants, Polytechnic faculty members, research scholars, M. Tech/ ME students, are eligible to participate in this program. It is expected that participants carry laptop.

### **Registration Fee:**

There is no registration fee for faculty and research scholars from academic institutes.

Registration Fee for industry/self-sponsored participants is Rs. 1500/-

Limited accommodation can be made available in institute/hostel guest house on self-payment basis. The participants have to bear their own travelling expenses.

### **Last Date of Registration:**

Hard copy of the duly filled and signed registration form along with registration fee should reach the coordinator on or before **1<sup>st</sup> December 2019**. However, scanned advanced copy of registration form must be sent for early registration and confirmation.

**REGISTRATION FORM**

**ATAL ACADEMY CELL SPONSORED SHORT TERM TRAINING  
PROGRAMME**

**ON**

**"Advances in Flood Modeling"**

**Organized by Civil Engineering Department, SVNIT, Surat – 395007**

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**Full Name (\*Capital letters):**

**Designation:**

**Institution:**

**Highest Qualification:**

**Experience: Teaching:**

**Industry:**

**Address for Correspondence:**

**Phone No (M):**

**Email Id:**

**Accommodation Required: Yes/No**

**Signature of Applicant**

**Signature & Stamp of Head of Dept. / Institute  
(With date and seal)**

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**Address for Correspondence**

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