



**AICTE Training and Learning Academy(ATAL)**  
**Sponsored 5-Days FDP on “Urban Hydrology”**  
**02nd – 06th August, 2021**

**ABOUT THE UNIVERSITY**

Pt. Jawaharlal Nehru, the first Prime Minister of India, laid the foundation stone of the UP Agriculture University on November 17, 1960 rechristened later as Govind Ballabh Pant University of Agriculture and Technology, Pantnagar. It is the first Agriculture University of the country established on the land grant pattern of U.S.A. and better known as the “Harbinger of Green Revolution” in India. The university is located at Pantnagar, Distt.-Udham Singh Nagar (Uttarakhand) & situated to the nearest hill station Nainital.

**COLLEGE OF TECHNOLOGY**

The College of Technology, one of the constituent colleges of the university, was established in 1966 and currently offers 8 Bachelor degree and 24 PG degree programmes including a self-financed MCA programme. The College has eleven departments namely Information Technology, Civil, Mechanical, Electrical, Electronics and Communication Engineering, Industrial & Production, Computer Engineering, Post-Harvest Process & Food Engineering, Farm Machinery & Power Engineering, Soil & Water Conservation Engineering, and Irrigation & Drainage Engineering. It has well-established modern infrastructures with modern facilities.

**DEPARTMENT OF CIVIL ENGINEERING**

The Department of Civil Engineering was with the idea of equipping young people with the necessary technical knowledge and professional skills needed to address the challenges in the rapidly growing field of Civil Engineering. A well-qualified and dedicated team of faculty members provides the necessary strength to the department. The department is equipped with most modern equipment catering to the requirement of research. The department carryout R&D and Consultancy works in various fields of Civil Engineering.

B.E Civil Engg, (NBA Accredited), Post Graduate programmes are also offered in Structural Engineering, Hydraulic Engineering, Soil Mechanics and Foundation Engineering including PhD in Civil Engineering.

## **ABOUT ATAL**

AICTE is committed for development of Quality Technical Education in the country by initiating various schemes launched by Govt. of India. Ministry of Human resource Development Council understands that there is a need of the day to train the young generation in skill sector and having Faculties and Technicians to be trained in their respective disciplines. It was felt that Training with latest Tools and Technologies is vital to keeping an Institute competitive and more productive. Training is required for increasing the knowledge and skills of students to make them more employable to acquire Global competencies. It also transforms them to harmonize with society and most importantly to make them a good citizen of the Country. Accordingly it was decided to establish AICTE Training and Learning(ATAL) Academies at different parts of the country.

## **PROGRAM OVERVIEW AND OUTCOMES**

The participants would be prepared to analyse urban storm water systems, urban precipitation and storm water runoff. They would also learn quantification of impacts of climate change on short duration high intensity rainfall in urban areas. Case studies of several cities in India are dealt with, in the presentations and thus they get an exposure to a variety of urban flooding problems. An exposure to the entire urban water cycle is also provided. The aim of this programme is to introduce the participants the latest technologies being used for the development of smart cities.

## **COURSE CONTENTS**

- Review of basic hydrology;
- Stormwater runoff generation
- Return period
- Hydrologic risk
- Frequency analysis
- IDF relationships
- Design storm
- Open channel flow in urban watersheds
- Interception storage
- Infiltration, Depression storage
- Combined loss models
- Estimation of runoff rates from urban watersheds, Flow routing
- Storm water drainage structures Storm water detention
- Structural and non-structural control measures
- Source control techniques; urban stormwater models; introduction to urban groundwater systems.

### Address for Correspondence

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### IMPORTANT DATES

**Last Date for Registration: 24.07.2021, Intimation of Selection: 26.07.2021**

### RESOURCE PERSONS

- Experts from IISc/IIT & other Government Organizations
- Resource Persons from Industries.
- Faculty member/ Topic Experts from Host institute and other premier Institutions.

### GUIDELINES

- No Registration Fee
- The faculty members of the AICTE approved institutions, Research scholars, PG Scholars, participants from Government, Industry (Bureaucrats/Technicians/Participants from Industry etc)
- Eligible Participants will be selected on First Come First served basis.
- With the help of Desktop/Laptop/Tablet/Smart participants can attend the programme from anywhere.
- E-certificate will be issued to those participants who have attended the Program with minimum 80% Attendance and scored minimum 60% marks in the Online Test which will be conducted at end of the Program.

### REGISTRATION

- All the participants are requested to Register for this FDP through online only

<https://www.aicte-india.org/atal>

<https://sites.google.com/view/urbanhydrology>

- A scanned copy of your Institutional ID card must be uploaded while registration.
- Registration for all the Participants is mandatory.

**Coordinator**

**Dr H J Shiva Prasad**, Professor, Department of Civil Engineering

**Co-Coordinator**

**Dr Jyothi Prasad**, Professor, Department of Civil Engineering