

“ About VMSBUTU, ” Dehradun

Veer Madho Singh Bhandari Uttarakhand Technical University (VMSBUTU), Dehradun was established on 27th January 2005 by Govt. of Uttarakhand through the Uttarakhand Technical University Act 2005. It is situated at NH-72 Suddhowala, Dehradun. There are 81 Affiliated Private Institutions and 12 Government Institutions in the University. University is running 08 UG, 6 PG and 18 Ph.D programmes with approximately twenty thousand students in various courses.

About THDC-IHET, Tehri

THDC Institute of Hydropower Engineering and Technology (THDC-IHET) is a campus institute of Veer Madho Singh Bhandari Uttarakhand Technical University, Dehradun, established in Bhagirathipuram, Tehri, the heart of hill state Uttarakhand. The institute is situated at distance of 3 km from the Tehri dam, which is one of the largest hydropower dams in the world.

The institute is providing B. Tech course in core engineering streams and M. Tech in Hydropower & Renewable Energy; fostering the spirit of national integration among the students, a close interaction with industry and a strong emphasis on research, both basic and applied. The institute provides grand infrastructure, well equipped labs, modernized classrooms, computer centre, seminar hall and an automated library. In addition, best possible facility of hostel, sports, gym, canteen and transportation are offered. Well qualified faculties of the institute provide best educational, research and professional environment.

About the Department

The department of Mechanical Engineering was established with the commencement of the institute.

The department is offering UG program in Mechanical Engineering and PG program in Hydro & Renewable Energy. The department has developed state-of-the-art infrastructure including fully equipped laboratories to impart world class education. Extracurricular event is a regular phenomenon to ignite the minds of graduating buds. The laboratories are equipped with state of art equipment and excellent infrastructure. The department is actively engaged in research, consultancy and developmental activities besides imparting regular teaching.

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AICTE Training and Learning (ATAL)
Academy
Faculty Development Programme (FDP)
On
Hydropower & Water Resource
Management for Sustainability

(20 -25 November, 2023)

Coordinator
Himanshu Nautiyal



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About Atal Academy

All India Council for Technical Education (AICTE) through its newly established AICTE Training and Learning (ATAL) Academy have intimated Faculty Development Programs in various thrust domains of modern technology to impart quality training to Faculty Members, Research Scholars and PG students. The objectives of ATAL Academy are as follow:

- To set up an Academy which will plan and help in imparting quality technical education in the country.
- To support technical institutions in fostering research, innovation and entrepreneurship through training.
- To stress upon empowering technical teachers & technicians using Information & Communication Technology.
- To utilize SWAYAM platform and other resource for the delivery of trainings.
- To provide a variety of opportunities for training and exchange of experiences. Such as workshops, Orientations, learning communities, peer mentoring and other faculty development programmes.
- To support policy makers for incorporating training as per requirement.

About the FDP

Hydropower is one of the most promising alternatives for sustainable power generation throughout the world. Nations like India has a huge potential of Hydropower generation; which can be quite beneficial to reduce the dependency on conventional sources of power generation. The FDP is planned to provide a comprehensive overview of the dynamic interaction between hydropower generation and associated water resource management to achieve sustainability. Through this FDP, participants will go into the basic principles, practices, and challenges

associated with hydropower generation while ensuring the effective allocation and conservation of water resources. They will gain insights into the challenges and opportunities in balancing allocation of water for multiple uses. Thus, the participants will have thorough understanding of the relationship between water resource management and hydropower. They will be also get with practical insights, impressive practices, and strategies to contribute effectively to achieve sustainable development initiatives in the power and water sectors.

Contents

The major themes/contents of the FDP are as follow:

- Prediction and Measurement of water availability for hydropower generation and other applications
- Hydropower Technologies and Operations
- Water Resource Management Strategies
- Challenges and opportunities in balancing hydropower generation and water resource management
- Application of AI in water resource management
- Pumped storage hydropower generation.
- Techniques for assessing and mitigating the environmental impacts of hydropower projects
- Principles of sustainable development and their application in hydropower projects
- Case Studies
- Field Visits

Who Can Attend

The faculty members of AICTE approved Institutions, Universities, research scholars; PG Students; Participants form Government, Industry and professionals from R&D labs.

Registration Process

There is no registration fee for participants. All boarding and lodgings arrangements will be made by THDC-IHET, Tehri. External Participants (traveling more than 20 km one side to attend the FDPs) who attend at least 90% of the sessions shall be reimbursed at the end of the FDP (Rs. 2,000 (lump sum) per External Participant). Registrations can be done online using the link: www.aicte-india.org/atal

Contact Person

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