



**The AICTE-MRSPTU Sponsored  
6-day Online Short-Term Training Programme (STTP)**

Being organized by

**Department of Civil Engineering  
Giani Zail Singh Campus College of Engineering & Technology  
Maharaja Ranjit Singh Punjab Technical University  
Bathinda - 151001 (Punjab)**

on

**“CLIMATE CHANGE & WATER SECURITY”**

**SCHEDULE**

***1<sup>st</sup> - 6<sup>th</sup> February 2021***

**ONLINE REGISTRATION PROCESS**

- ✚ Only Faculty members (Teachers) from universities/institutions of India are eligible to participate in this Programme.
- ✚ Maximum 100 participants are allowed to attend this online STTP on a first come first serve basis.
- ✚ No registration fee, it's totally free.
- ✚ Click on the following given google form link to register for this online STTP:  
<https://forms.gle/YpzPWQmRyc7Fj65Y7>
- ✚ The Certificates shall be issued to only those participants who have attended the program with minimum 80% attendance and scored minimum 60% marks in the test conducted at the end of this programme.

**For any Query - Contact**

Er Sukhdeep Singh, Assistant Professor & Programme Co-coordinator  
on [civilfdp@mrsptu.ac.in](mailto:civilfdp@mrsptu.ac.in) or +91-7696506311

## ABOUT THIS PROGRAMME

The capacity of a population to maintain sustainable access to sufficient quantities of acceptable quality water to ensure human well-being, livelihood, socio-economic development, protection against water-borne and water-related disasters, and to preserve ecosystems is termed as water security. Water demand is increasing globally due to the booming population, rapid industrialization, rampant urbanization, and extensive agricultural practices. In the world, nearly 785 million people lack a safe drinking water service. Nearly, 1.8 billion people use feces contaminated drinking water sources and have a high risk of contracting cholera, dysentery, typhoid, and polio (WHO 2019). As per a World Health Organization (WHO) estimation, by 2025, 50% of the global population will be living in water scarcity areas. The United Nations world water development report (2016) has indicated that more than 40% of the global population could be living in severe water stress areas by 2050.

India is also facing severe water security problems both in terms of quantity and quality due to a lack of required infrastructure, health services, and management. India ranked 120th out of 122 nations in water quality index and 133rd among 180 nations in water availability. Approximately 21% of diseases are related to water among all diseases of the country (Snyder 2020). As per UNICEF and WHO (2012) estimates, approximately 97 million Indians do not have access to safe water.

Climate change is one of the major factors affecting the water security of India. The rising temperature affects the Himalayan glaciers, monsoon pattern, evapotranspiration etc. High temperature, changes in timing, intensity, and duration of precipitation are the significant consequences of climate change which can further affect the water quality. The alternate pattern of precipitation leads to floods and droughts, which play an important role in the degradation of water quality by adding a quantum of concentrated pollutants. As per the World Bank report (2018), climate change can affect 6% GDP of some regions due to water security, resulting in migration and conflict. As per the United Nations Convention to Combat Desertification (UNCCD), by 2030, due to climate change impacts on water scarcity, 24–700 million people may be displaced from some arid and semi-arid places.

The achievement of water security in the future will be a very challenging task. During this STTP, the experts will discuss the current situation and future challenges regarding water security along with prospective health changes. Further, the impact of climate change on water security will also be discussed and this STTP will enable the participants to manage future challenges related to water security.



## **MRSPT University Details**

Maharaja Ranjit Singh Punjab Technical University (MRSPTU), Bathinda is an affiliating Technical University, established by Govt. of Punjab vide Punjab Act no. 5 of 2015 and approved under section 2(f) & 12(B) of UGC. With spontaneous upswing in demand for quality Technical Education, for exponential socio-economic growth of the Malwa region, to bridge the gap between demand and supply of employable technical human resource, exigency for creation of a new State Technical University in Punjab was realized. In the pursuit of creating excellence in teaching, research and skill development, the university has to attain highest standards by following and conforming to the norms/standards/policies laid down by the All India Council for Technical Education (AICTE), New Delhi and University Grants Commission (UGC), New Delhi. As an outcome of the above endeavours, the university is expected to generate and maintain resources through consultancy services, testing services, continuing Education Programmes, national and Inter-national collaborations, MoU, transfer of intellectual property rights etc. MRSPTU will cater to the needs of Quality Technical Education in eleven districts of Punjab encompassed in its jurisdiction.

## **Institute details**

Established by the State Government of Punjab in 1989, as an AICTE approved Engineering Institution; Giani Zail Singh Campus College of Engineering & Technology MRSPTU, Bathinda (Punjab); today is a constituent college of Maharaja Ranjit Singh Punjab Technical University. Presently college provides Engineering education leading to award of B. Techs, M. Techs and PhD in 6-disciplines of Engineering and Technology, with the objectives to provide, upgrade and promote Quality Technical Education, Training & Research and to create entrepreneurship environment for the pursuit of excellence in Technical & Scientific Education in close cooperation with industry.

## **Departmental details**

Department of Civil Engineering established in 1989, offers AICTE approved regular courses in B.Tech. & B.Tech. (LEET) along with M. Tech. in 'Construction Technology & Management'. Department also offers Doctoral programs in Civil and its allied areas. Currently 8 PhD research scholars are working in the department for their PhD research work. Department has on its rolls, well qualified and experienced regular doctoral faculty from prestigious institutes of the country. Senior faculty members of the department are involved in offering their expertise in the formulation/revision of various BIS/IRC codes of practice at the national level.

Department has 9-fully equipped laboratories including a Computer lab with specialized softwares and some of these labs are modernised under MODROBs scheme of AICTE. The Consultancy cell of Civil Engineering department is providing services to various central/state Government's departments and private agencies and is a major source of resource generation.

A 6-day online STTP on “**CLIMATE CHANGE & WATER SECURITY**” during **1<sup>st</sup> to 6<sup>th</sup> February, 2021** is going to be organized by the Department of Civil Engineering, GZSCCET MRSPTU on the occasion of celebrations of 31-years of GZSCCET in the service of Technical Education.

## **Contact details of Coordinator**

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**ORGANIZING COMMITTEE FOR AICTE-MRSPTU ONLINE STTP ON  
“CLIMATE CHANGE & WATER SECURITY”**

**Being organized by the Department of Civil Engineering, GZSCCET MRSPTU, Bathinda.**

**CHIEF PATRONS:**

1. **Prof Anil D. Sahasrabudhe**  
Chairman, All India Council for Technical Education, New Delhi.
2. **Prof (Dr) Buta Singh Sidhu**  
Vice Chancellor  
Maharaja Ranjit Singh Punjab Technical University, Bathinda.

**PATRONS:**

1. **Dr M.P. Poonia**  
Vice Chairman, All India Council for Technical Education, New Delhi.
2. **Col. B Venkat**  
FDC, All India Council for Technical Education, New Delhi.
3. **Prof (Dr) Savina Bansal**  
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Maharaja Ranjit Singh Punjab Technical University, Bathinda.
4. **Prof G. P. S. Brar**  
Registrar, Maharaja Ranjit Singh Punjab Technical University, Bathinda.
5. **Prof (Dr) Balwinder Singh Sidhu**  
Coordinator, AICTE-MRSPTU MoU.
6. **Prof (Dr) Rakesh Kumar**  
Professor & Head, Department of Civil Engineering  
Giani Zail Singh Campus College of Engg & Tech, MRSPTU, Bathinda.

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**Co-coordinators:**

1. **Dr Gurpreet Singh Bath**  
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3. **Er Sukhdeep Singh**  
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**Member:** **Mr Kuldeep Kumar**  
M. Tech. CTM (Batch 2019), Department of Civil Engineering.