



Industry Institute Interaction (IIIC) and Institution's Innovation Council (IIC) 04-08-2025

A report on "Sense of Urgency to develop the preparation & implementation of operation plans in irrigation projects using the tools of AIML, Spatial Technologies & Optimization methods to ever increase the water use efficiency: Case Studies"



The Department of Civil Engineering organized a Guest Lecture on A report on "Sense of Urgency to develop the preparation & implementation of operation plans in irrigation projects using the tools of AIML, Spatial Technologies & Optimization methods to ever increase the water use efficiency: Case Studies" by inviting Dr Mohammed Hussain, in collaboration with the IIC. The expert lecture is designed to help the Civil and CSE (DS) students to understand how the tools of AIML, Spatial Technologies & Optimization methods. Throughout the session, the Resource Person engaged the student participants with theoretical concepts, real-world examples, and case studies to foster a deeper understanding.

The session began at 11AM with an introduction of the Resource Person Dr Mohd Hussain and his experiences in various fields. A total of 115 students (Civil 59 & CSE Ds 55) and 11 faculty (Civil 08 & CSE-DS 03) attended the Guest Lecture. Dr Mohd

Hussain, he spoke about Irrigation and its progress using IOT. He also emphasized on usage of cloud computing, drone technology with respect to water resources and irrigation. He said that Drone technologies can also be used as a part of |Spatial Technologies in coordination with Machine Learning. Artificial Intelligence can be used as a supporting tool for Irrigation systems to optimize moisture and enhance crop yield.





The resource person spoke about a project which was implemented in Turkey in which native plant species where grown by using Artificial Intellegence Technologies. He also emphasized on Flood monitoring, Drought monitoring, water use efficiency and Crop Production which can be implemented by using QGIS and Google |Earth Engine.



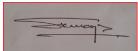








The session concluded with a recap of the key concepts like tools of AIML, Spatial Technologies, Optimization methods in irrigation projects. The session provided a comprehensive understanding of how these frameworks work together to foster innovation and problem-solving. The session ended by vote of thanks by Ms Harika III year CSE-DS student



1

CANH

Mr P Satish Kumar Guest Lecture i/c Dr G SUBBA RAO HOD-CE Dr G JANARDHANA RAJU Dean-SoE & Convener-IIC