

# REPORT ON PROFESSIONAL TALK

**TOPIC:** Land use and Land cover map and Hydrological Soil group map using Arc GIS

**DATE:** 8<sup>th</sup> November 2022

**VENUE:** Class room no.515

The event started with the self-introduction of M. Jenani, a B.E. in Civil Engineering final year, and R. Hemalatha, a B.E. in Civil Engineering final year. Proceeding with that, M. Jenani explained how to find the land use and land cover map using Arc GIS for the Cuddalore district; she also explained how to extract the base map and clip the Cuddalore district alone. The LULC map contains different colors, which indicate different land uses for different purposes. She also explained how to extract the LULC map for different years. Continuing with that, R. Hemalatha explained how to find a hydrological soil group map using Arc GIS. She explained how the hydrological soil map can be extracted by using the classification of hydrological soil groups. The detailed process has been explained by her, and the extraction of the world soil base map has been downloaded from the FAO catalog. Also, an explanation about the outline map of India has been downloaded from Diva GIS, and then the clipping process for the base soil group map of Cuddalore district has been given by her. Also, she explained how to extract HSM from the given collected maps, and hydrological soil classification has been explained. The event concluded with a session of doubt clearing.

**FLYER:**

The flyer features a dark blue background with a large orange circle on the left containing the text "Civil Engineering Association". At the top center is the SVCE logo (SVCE | Sri Venkateswara College of Engineering). To the right are three logos: the SVCE emblem, the CEA logo, and a QR code. Below these are social media icons for LinkedIn and Instagram with the handle "@cea\_svce". The main title "Professional talk on 'LAND USE & LAND COVER AND HYDROLOGICAL SOIL GROUP USING GIS'" is centered. On the right side, there are four overlapping 3D-style maps showing different GIS data layers: a network of roads and buildings, a green vegetated area, a topographic map, and a color-coded soil group map. Two circular portraits of speakers are shown: R.HEMALATHA and M.JENANI. At the bottom left, a calendar icon is next to the date "8th November". A list of roles and names is provided at the bottom right.

**Civil Engineering Association**

SVCE | Sri Venkateswara College of Engineering

SVCE Logo | CEA Logo | QR Code

in @cea\_svce

Professional talk on  
"LAND USE & LAND COVER AND  
HYDROLOGICAL SOIL GROUP  
USING GIS"

R.HEMALATHA | M.JENANI

8th November

Converer: DR. R. KUMUTHA (PROFESSOR & HOD/CVE)

Faculty Coordinator: M. SUREY PREYA (ASSISTANT PROFESSOR, CVE)

Association Incharge: DR. R. ABALAKSHMI (AP/CVE) | MR. S. HARISHARAN (AP/CVE)

Student Coordinators: R.HEMALATHA, FINAL YEAR | M.JENANI, FINAL YEAR

**PHOTOS:**

