



ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP)

ON

Advancement in Soft Computing Techniques for Sustainable Water Management

(3rd August - 13th August 2026)

Organized by

Electronics & ICT Academy, NIT Warangal

In Association With

Department of Civil Engineering, NIT Warangal

Sponsored by Ministry of Electronics and Information Technology (MeitY), GoI.



Preamble:

"Electronics & ICT Academy – Phase II" was set up at NIT Warangal with financial assistance from MeitY, GoI. This academy's role is to offer Faculty Development Programs in standardised courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

About the FDP:

Water systems worldwide are becoming increasingly intricate due to climate variability, rapid urbanisation, and escalating water demand. Conventional analytical and numerical methodologies frequently fail to adequately represent the nonlinear, uncertain, and dynamic characteristics of hydrological processes. Soft computing techniques, such as ANN, Fuzzy Logic, Evolutionary Optimisation, and hybrid AI models, provide robust alternatives for modelling, prediction, and decision-making in water resources engineering. This Faculty Development Programme aims to enhance the capabilities of faculty, researchers, and professionals by equipping them with advanced computational tools and practical skills to address contemporary challenges in sustainable water management.

Major Course Content:

- Overview of Soft Computing Techniques
- Fundamentals of ANN, LSTM and other ML techniques
- Fuzzy Logic and Fuzzy Systems
- Evolutionary Algorithms for Optimisation
- Hybrid AI Models for Hydrological Modelling
- Climate Change and Big Data Analytics
- Case Studies and Hands-on Sessions

Faculty conducting this program:

The program will be conducted by faculty members from NIT Warangal. Academicians in the relevant field from IITs/NITs/IIITs are invited to deliver lectures. Speakers from industries are also expected to deliver as part of the course.

Registration Fee Particulars:

Faculty and Research Scholars	Rs.500/-
Industry Participants	Rs.1500/-

Participants need to pay the Registration Fee Online using the following details

Online Transfer Details	
Account Name:	Electronics & ICT Academy NITW
Account No	: 62423775910
IFSC	: SBIN0020149
Bank and Branch:	State Bank of India, NIT Campus, Warangal

How to apply:

Participants are required to fill the online registration form by clicking on the following link:

<https://forms.gle/qeTBrGcQNoVSS9og9>

Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 50 (fifty). Candidates will be issued satisfactory certificates on successful completion of the course.

Important Dates:

Last Date for Registration	30.07.2026
Selection List by E- mail	01.08.2026
Duration	03.08.2026 to 13.08.2026

About NIT Warangal:

National Institute of Technology, Warangal, is the first among 17 RECs set up as a joint venture of the Government of India and the state government. Over the years, the college has established itself as a premier Institute imparting technical education of a very high standard, leading to B.Tech degrees in various branches of engineering, M.Tech., and Ph.D. programmes in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

About Department of Civil Engineering, NIT Warangal:

The Department of Civil Engineering offers a Bachelor of Technology (B.Tech) program in Civil Engineering, seven Master of Technology (M.Tech) programs, and a PhD program. The Department has been a recognised QIP center since 1978. It is equipped with well-established laboratories and modern facilities. The faculty members are experienced and actively involved in teaching, research, capacity building initiatives, and industry extension services. Additionally, faculty members serve on various policy-making and professional bodies. The Department maintains collaborations with reputed industries and R&D organisations.

Coordinators:

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