

AICTE SPONSORED

One Week Online Short Term Training Program (STTP)

PHASE - II



On

SOFT COMPUTING TECHNIQUES IN CIVIL ENGINEERING

17th - 22nd August, 2020

CONVENOR

Dr Pala Gireesh Kumar
Assoc. Prof & HOD-CE

COORDINATOR

Dr. U. Venkatapathi Raju
Professor, CE



SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN (AUTONOMOUS)

(Permanently Affiliated to JNTUK, Accredited by NBA & NAAC with 'A' Grade)
(Winner in IMCRB National Quality Award 2017, Winner of APQO International Award)
Vishnupur, Bhimavaram - 534202, W.G District, Andhra Pradesh, India

ABOUT THE COLLEGE

Shri Vishnu Engineering College for Women (SVECW) was established during the academic year 2001-2002 to empower women in professional courses. This institute has witnessed significant growth within 15 years and stands out as one of the best engineering colleges in AP. This institute is accredited by NAAC with 'A' grade. This institution is under Autonomous status from the academic year 2014-2015 and it is the first women's college under JNTUK to get such an autonomous status. In recognition of its progressive strides, the World Bank has granted TEQIP Phase - II project to SVECW. Indian Merchant's Chamber (IMC) recognized the services of SVECW with its Ramakrishna Bajaj National Quality Award in the education sector

ABOUT THE DEPARTMENT

The Department of Civil Engineering (CE), SVECW was established in the academic year 2009-2010 with an annual intake of 60. The Department is accredited by NBA under Tier II. The Department of Civil Engineering received the project from the Department of Science and Technology (DST), New Delhi worth of Rs 60 lakhs for the construction of 3 nos sewage treatment plants in the SVEC Campus to treat the wastewater. The treated wastewater is utilized for various purposes and also serves Bhimavaram Town. The Department has good strength of specialized persons from Structural, Geotechnical, Water Resources, Transportation, and Geo-Informatics. The Department periodically organizes seminars, symposia, FDPs, workshops, and guest lectures for the benefit of both the students and the faculty. Apart from the regular academics and activities, students are motivated and encouraged towards research works & conferences under the guidance of the HOD who has won the World Research Council International Best Researcher Award of the year 2020 in the area of Terramechanics and Nano Materials in Pavements. The Department has an excellent blend of young and zestful HOD, with well experienced and diligent faculty.

ABOUT THE PROGRAM

The field of engineering is a creative one and the problems encountered in this field are generally unstructured and imprecise influenced by intuitions and past experiences. The conventional methods of computing relying on analytics or empirical relations become time-consuming and labor-intensive when posed with real-life problems. To study, model, and analyze such problems, approximate computer-based soft computing techniques inspired by the reasoning, intuition, consciousness, and wisdom possessed by a human being are employed. In contrast to the conventional computing techniques which rely on exact solutions, soft computing aims at exploiting given tolerance of imprecision, the trivial and uncertain nature of the problem to yield an approximate solution to a problem in a quick time. Soft computing, being a multidisciplinary field uses a variety of statistics, probabilistic, optimization tools and other techniques like Genetic Algorithms, Conventional & Soft Computing Techniques to Solve Transportation Problems, Simulation Optimization Models, Data Mining in WRE, Computer Application to Conduct Quality Research, FEM Applications in GT, Sediment Issues & Measures, Monte Carlo Simulations in Structural Mechanics, FEM Applications in Terramechanics which to some extent has replaced the time consuming conventional techniques of computing with intelligent and time-saving computing tools

PROGRAM OBJECTIVES

The primary objective of the course is to impart training to Faculties, Research Scholars, Post Graduate Students, Engineers and other Engineering Professionals to familiarize themselves with the recent developments about soft computing applications in civil engineering so as to further promoting research using soft computing techniques.

SCHEDULED TIMINGS

WEBINAR DETAILS

RESOURCE PERSONS

DAY 1
17-08-2020
10A.M-11.30A.M

GA for Single and Multi-Objective Optimization of Reservoir Operation

Prof D Nagesh Kumar
Professor
IISc Bangalore

DAY 1
17-08-2020
4 P.M- 5.30P.M

Conventional & Soft Computing Techniques to Solve Transportation Problems

Dr S Marisamynathan
Assistant Professor
NIT Trichy

DAY 2
18-08-2020
10 A.M- 11.30A.M

Simulation Optimization Models for Groundwater Management

Prof T I Eldho
Professor & Head
IIT Bombay

DAY 2
18-08-2020
4 P.M-5.30P.M

Data Mining in Water Resources Engineering

Dr Komaragiri Srinivasa Raju
Professor
BITS Pilani Hyderabad

DAY 3
19-08-2020
10 A.M- 11.30A.M

Computer Application to Conduct Quality Research

Dr Ayyanna Habal
Assistant Professor
PDPU, Gandhinagar, Gujarat

DAY 3
19-08-2020
4 P.M-5.30P.M

Data Mining in Water Resources Engineering

Dr Komaragiri Srinivasa Raju
Professor
BITS Pilani Hyderabad

DAY 4
20-08-2020
10A.M-11.30A.M

FEM Application in Geotechnical Engineering - Theory

Dr K Muthukkumaran
Professor
NIT Trichy

DAY 4
20-08-2020
4 P.M- 5.30P.M

Sediment Issues and Control Measures

Dr Venu Chandra
Associate Professor
IIT Madras

DAY 5
21-08-2020
10 A.M- 11.30A.M

FEM Application in Geotechnical Engineering - Practices

Dr K Muthukkumaran
Professor
NIT Trichy

DAY 5
21-08-2020
4 P.M-5.30P.M

Monte Carlo Simulations in Structural Mechancis

Dr Greegar George
Assistant Professor
NIT Trichy

DAY 6
22-08-2020
10 A.M- 11.30A.M

FEM Applications in Terramechanics

Dr Pala Gireesh Kumar
Head & Associate Professor
SVECW(A)

DAY 6
22-08-2020
4 P.M-5.30P.M

Exam on the STTP topics covered, by Program Evaluation Committee(PEC)

REGISTRATION DETAILS

Kindly enroll using the link provided below for free

<https://forms.gle/TzwKSSaDybxKuRKJA>

COURSE OUTLINE

The course will cover various soft computing techniques

- GA Optimization of Reservoir Operation
- Conventional & Soft Computing Techniques to Solve Transportation Problems
- Simulation Optimization Models
- Data Mining in WRE
- Computer Application to Conduct Quality Research
- FEM Applications in GT- Theory & Practices
- Sediment Issues & Measures
- Monte Carlo Simulations in Structural Mechancis
- FEM Applications in Terramechanics

TARGET GROUP

STTP is expected to benefit Faculties, Research Scholars, Post Graduate Students, Engineers and other Engineering Professionals who are working in the area of the relevant disciplines.

IMPORTANT DATES

- The last date for registration : 15-08-2020.
- Intimation to the Registrants : 16-08-2020.

GENERAL INFORMATION

- There is no limit for the number of participants. So every registrant is eligible for attending the STTP.
- Candidates will be issued e-certificates on successful completion of STTP and satisfactory performance in the test conducted by Program Evaluation Committee (PEC) at the end of the program

ORGANIZING COMMITTEE

CHIEF PATRONS

Shri K. V. Vishnu Raju, Chairman, SVES
Shri R. Ravi Chandran, Vice Chairman, SVES
Shri K. Aditya Vissam, Secretary, SVES

PATRONS

Dr. G. Srinivasa Rao, Principal, SVECW (A)
Dr. P. Srinivasa Raju, Vice Principal, SVECW (A)

CONVENOR

Dr. Pala Gireesh Kumar, HOD-CE, SVECW (A)

COORDINATOR

Dr. U. Venkatapathi Raju, SVECW (A)

CO-COORDINATORS

Mrs. A. Parvathi Devi, SVECW (A)

Ms. V. Manasa, SVECW (A)

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Dr. P. Sridhar, SVECW (A)

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Mrs. Ch.J.Y. Pavany, SVECW (A)

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