



Centre for Continuing Education

A One Week **ONLINE**
Short Term Training Programme on

Art of Algorithm Writing and Computer Programming with applications to Image Processing

24th – 28th January, 2022

**Call for Registration and
Participation**

Coordinators

Dr.U.S.N.Raju

Dr.P. Venkata Subba Reddy

Organized by

**Department of Computer Sci. and Engg.
National Institute of Technology**

Warangal – 506 004
Telangana state, India



Background of the Programme:

This course is for beginners intended to learn computer programming. Over the centuries different technologies have evolved in the world starting from the industrial revolution, steam engine, telephone to present computer technology that necessitates profuse usage of computers in present era. To make the computer work on different tasks, instructions are to be given in the language that it understands, which is done by a programmer. With good knowledge on computer programming, one can work in various domains like Image Processing, Machine Learning, Artificial Intelligence, Compiler Design, Database Management System, Data Structures, Computer Networking, etc.

Objectives of the Programme:

- To enable the participants to understand the basics of computing and computer.
- To empower the participants to understand how to make the computer to respond to the instructions.
- To make the participants learn how to write different algorithms for the given problems.
- To provide the participants with teaching and Hands-On experience in using C++ and Python languages covering majority of the topics.
- To make the audience to understand the fundamentals of Digital Image Processing and use of C++ and Python for Digital Image Processing.

Resource Persons:

Faculty of the CSE departments, who have the expertise in these areas will be the core faculty of the workshop. Eminent Faculty from IITs, other premier institutes and Software Industry in the country are the external resource persons for this programme.

Topics in the Programme:

- Fundamental of Computing and Computer.
- Algorithms writing, algorithms analysis, finding the better algorithms.
- C++ Programming Language: Basics, Loops, Functions, Pointers, Structures, Dynamic Memory, Files.
- Python Programming Language: Basics, Loops, Lists, Tuples, Dictionaries, Files, Functions, Libraries for Image Processing
- Introduction to Digital Image Processing
- Image Enhancement, Image Compression, etc.
- Implementation of image processing algorithms using C++ and Python.
- Introduction to Neural Networks.
- Use of Neural Networks for Image Processing.

Registration is open to:

The program is open to all the faculty members, research scholars, and students of all educational/ research institutions. Working Professionals from Industry and R&D Organizations

Registration Fee and Selection:

Registration fee is ₹500/- per participant. Number of participants is limited to hundred (100) and the participants will be selected on first-come first-served basis. On receipt of the proof (Transaction ID) of online payment of registration fee, the applicants will be sent confirmation of their participation through Email on the next day.

Account Details for Online Payment:

Account Number:	62403680215 (Savings Account)
Account Name:	CCE NITW
Bank Name:	State Bank of India (SBI)
Branch:	NIT Warangal
IFSC Code:	SBIN0020149

Note: While paying online use the word “AAWCP” in the description of the transaction.

How to Apply:

One can register for the course by filling in the Google form available at the link given below:

<https://forms.gle/E1fFfSkqhBC3M1JK7>

Important Dates:

Last date of registration: 17th January 2022

Centre for Continuing Education of NIT Warangal:

This Centre of NIT Warangal organizes Continuing Education Programmes and Workshops in the frontier areas of Science, Engineering, Technology, Management, Humanities, Social Science and Socially relevant themes on self-financing basis in three different modes: (i) At NIT Warangal by NIT Warangal (ii) At NIT Warangal in collaboration with other organizations (iii) By NIT Warangal Faculty at the Host Organization/Institute.

Brief profile of the Department of Computer Science and Engineering:

The Department of Computer Science and Engineering (CSE) offers B.Tech. course in CSE, M.Tech courses in CSE, Information Security (IS) and Master of Computer Applications (MCA). The Department has experienced faculty with good publications and well-established laboratories. The department focuses on imparting practical and project based training to students through competency based curriculum. The Department has liaison with reputed industries and R&D organizations like Microsoft, IBM, Oracle, Accenture, Infosys, TCS, EMC2, C-DAC, Motorola, NIC, Sun Micro Systems, SPSS and tie up with IISc in certain areas. The Department conducts various sponsored programmes and workshops throughout the year.

About NIT Warangal:

National Institute of Technology Warangal, formerly known as Regional Engineering College was established in 1959. Two years back NIT Warangal has celebrated its Diamond Jubilee (1959-2019) year of establishment. Over the years, it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 14 Departments offering eight undergraduate and 31 post-graduate programmes besides doctoral programmes. About 5000 students across the country and about 500 international students study on the campus. It is a fully residential campus sprawling over 250 acres with excellent infrastructure in the form of state of the art library, seminar halls, guesthouses and laboratories. In recent years, NIT Warangal has grown strongly in terms of infrastructure, research facilities and Centres of Excellence This institute has produced notable alumni who excelling in various fields like politics, holding diplomatic positions, CEO of companies, etc.

About Warangal:

Warangal is the second largest city of the new state of Telangana. It is situated at a distance of 140 km from the state capital Hyderabad (Nearest Airport). It is well connected by Rail (Kazipet Junction is two km away and Warangal Station is 12 km away) and by Road (NH 202). Warangal is renowned for its rich historical and cultural heritage. It was the seat of erstwhile Kakatiya dynasty. It is a seat of tourist attractions with a number of historical monuments like Thousand Pillars Temple, Warangal Fort, Bhadrakali Temple, Ramappa Temple and Laknavaram Lake located in a radius of 30 kms.

For any queries regarding this Programme, please contact the Coordinators.

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