## **PROGRAM SCHEDULE**

Date	Time	Description
28.10.2023	09:30 - 09:35 AM	Prayer
	09:35 - 09:45 AM	Inauguration
	09:35 - 10:00 AM	Welcome address
	10:00 - 10:15 AM	Felicitation address
	10:15 - 11:00 AM	Inaugural address
	11:00 - 11:15 AM	Tea break
	11:15-12:45 PM (Session 1)	Overview of Problem Solving using Packages in C++
29.10.2023	2:00-3:30 PM (Session 2)	Sorting based Problem solving
	9:30-11:00 AM (Session 3)	Problem Solving using Linear Data Structures
	11:00 - 11:15 AM	Tea Break
	11:15-12:45 PM (Session 4)	Problem Solving using Divide and Conquer Strategy
	2:00-3:30 PM (Session 5)	Problem Solving using BST
30.10.2023	06:00 - 07:30 PM	Problem Solving using Heap
31.10.2023	06:00 - 07:30 PM	Problem Solving using Balanced BST
01.11.2023	06:00 - 07:30 PM	Problem Solving using Hash Table
02.11.2023	06:00 - 07:30 PM	Greedy Strategy and Its Applications
03.11.2023	06:00 - 07:30 PM	Disjoin Set Union and Its Applications
04.11.2023	9:30-11:00 AM (Session 6)	Graph Traversal and its Application
	11:00 - 11:15 AM	Tea break
	11:15-12:45 PM (Session 7)	Shortest Path algorithms and Applications
	2:00-3:30 PM (Session 8)	Minimum Spanning Tree and its Application
05.11.2023	9:30-11:00 AM (Session 9)	Max-Flow and its Application
	11:00 - 11:15 AM	Tea break
	11:15 - 12:45 PM (Session 10)	Top Down Dynamic Programming Based Problem Solving
	02:00 - 3:30 PM (Session 11)	Bottom Up Dynamic Programming Based Problem Solving

# **ORGANISING COMMITTEE**

# **Chief Patron**

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Director, IIITDM Kancheepuram

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#### **Coordinator**

#### Dr. V. Masilamani

Associate Professor & HoD-CSE, IIITDM

## **Co-Coordinator**

#### Dr. Raghavan

Assistant Professor, IIITDM

#### **Contact**

## Himanshu Malviya

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# **IEEE Sponsored**

workshop on

# "Competitive Programming"

28.10.2023 to 05.11.2023







No Competition, No Progress

Sponsored by
IEEE Madras Section
and
IEEE Computer Society

(Hybrid Mode)

## ABOUT HITDM KANCHEEPURAM

Indian Institute of Information Technology, Design and Manufacturing Kancheepuram (IIITDM) is an Institute of National Importance under the Ministry of Education setup in 2007 with a vision to promote creative and knowledge intensive products and processes in the manufacturing sector.

- The Institute is envisioned as an academic institution of excellence that would facilitate and promote the competitive advantage of Indian products in global markets. It is strategically located in the proximity of the industrial clusters in Chennai. The institute offers academic and research programs that integrate engineering design, manufacturing and management with information technology.
- The Institute is presently offering B.Tech programmes in Computer Science and Engineering, CSE with Artificial Specialisation in Intelligence, Electronics and Communication Engineering, Mechanical Engineering and Smart Manufacturing. In addition, five dual-degree M.Tech and programmes, M.Des in Integrated Product Design, and interdisciplinary Ph.D programmes in core and applied areas of engineering. IIITDM Kancheepuram has showcased its commitment to excellence by securing the 8th rank in the Innovation Category and an impressive rank between the band 101-150 overall in the NIRF ranking. In addition, IIITDM Kancheepuram has been placed in the band "Excellent" (Rank 11-21) among the Institutes of National Importance (INI) in ARIIA 2021.

# **ABOUT CS DEPARTMENT**

Computer Science and Engineering stream started in 2009. IIITDM Kancheepuram's Computer Science and Engineering curriculum is modelled on the ACM (Association for Computing Machinery) recommendations and is the first of its kind engineering program offered in India. This program is aimed at producing engineers equipped with skills required for efficient hardware-software interaction.

In addition to courses offered by the conventional Computer Science curriculum, this novel program offers core courses such as Embedded Systems, Human-Computer Interaction, Signals and Systems, Product Design etc., that equip the students with both computing and electronics engineering skills that are very much required for the successful creation of products requiring hardware - software interactions.

Our graduates would find wide scope in VLSI, Embedded Systems and Electronics Product Manufacturing related industries in addition to application development avenues and higher studies that are open to conventional Computer Science engineers. Currently, 15 faculty members and 4 staff members are serving the department.

The laboratories are equipped with powerful Deep Learning Engine, HP Workstations, FUJITSU Windows Server, IBM Debian Linux server and network infrastructure such as the ISDN equipment, network distribution switches, firewall and redundant wireless access controller to cater to the computing needs of the institute practice courses.

# **ABOUT IEEE MADRAS SECTION**

IEEE Madras Section is an association of technical professionals in Tamil Nadu who has volunteered themselves in providing technology enhancement in engineering disciplines in the locality through the conference, events, technical activities. For more visit: <a href="https://www.ieeemadras.org/">https://www.ieeemadras.org/</a>

# **ABOUT IEEE COMPUTER SOCIETY**

The IEEE Computer Society engages computer engineers, scientists, academia, and industry professionals from all areas of computing to set the standard for the education and engagement that fuels continued global technological advancement.

## **OBJECTIVE OF WORKSHOP**

Coordinating with IEEE, Madras Section, and also IEEE Computer Society this short term course on Competitive Programming in hybrid mode will be conducted.

- The objective of the course is to motivate and train the students to take up programming as a sport.
- The prerequisite for the course is DSA and C.
- The focus of the course will be to train students to solve problems using the concepts studied in DSA(Not to teach the concepts again).
- Expected participants will be all Engineering students with some exposure to DSA

## **OUTCOME**

By attending this workshop,

- Participants will take part in coding competitions.
- They may get better placement opportunities.
- They may get admission in good college and universities.
- They may get motivated to have startups.

The speakers will be faculty and alumni from IITs, IIITs and NITs.

# **VENUE**

Hybrid Mode, Hall H05, IIITDM Kancheepuram

# **REGISTRATION DETAILS**

# **Registration Link:**

https://forms.gle/gQFVtQ7oofC786Qq6

- Last Date for Registration: 25-10-2023
- Registration starting from:
   13-10-2023
- Registration Fee:
  - IEEE Member/IIITDM Student:1000₹
  - Others: **2000₹**
- Amount to be paid to
   Bank of India

   Recipient: IEEE Madras Section
   Account No.: 800210100014174

IFSC Code: BKID0008002