DATA STRUCTURE AND ALGORITHM

Get the skills to get ahead, stay relevant and earn more

Book your seat now

Google

Reviews 2,500+ ● Excellent

★★★★★

13+ YEARS EXPERIENCE

ISO 9001:2015 CERTIFIED COMPANY

12800+ STUDENTS TRUST US

About INCAPP

INCAPP Coding Institute, established in 2011, was founded with the goal of addressing the global tech skills shortage. Our commitment lies in offering high-quality training programs to students, professionals, and organizations. We strive to empower individuals with coding skills, facilitating personal and professional growth, and assisting organizations in enhancing their workforce's productivity and effectiveness.

Our company boasts a team of seasoned instructors, experts in their fields. We employ the latest teaching methodologies and technologies to provide engaging and interactive training programs.

"We foster innovation and empower aspiring coders. As founders, we are excited to welcome you aboard. Whether you're new to coding or already experienced, our hands-on curriculum and expert instructors will guide you. Coding is more than just writing lines; it involves creativity and problem-solving. Embrace challenges and celebrate your successes, knowing that coding is a journey of continuous growth. Let's get started!"
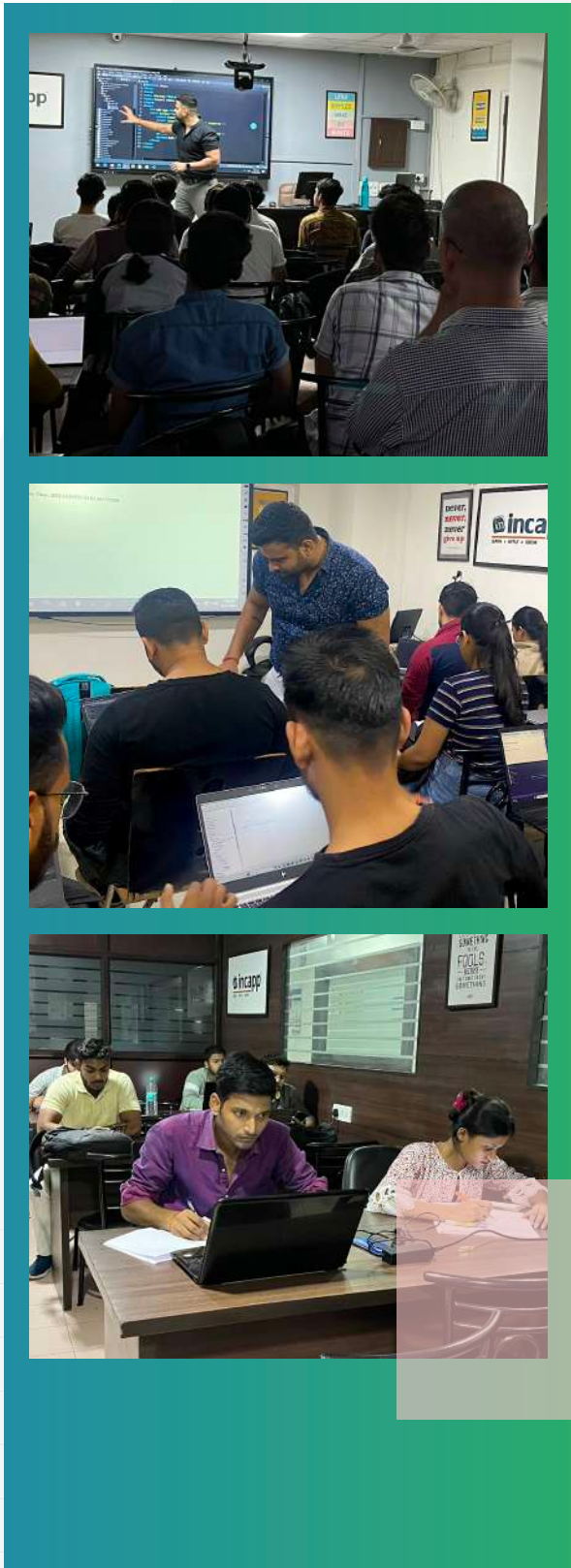
RAHUL CHAUHAN
Co-Founder & Instructor

PRAVEEN CHAUHAN
Co-Founder & Instructor

Oracle & Microsoft Certified

How We Help You To Learn

1 Expert Instructors

Top-class instructors, experts in their fields, teach through practical training.

2 Assignments

Understand all concepts through well-structured assignments.

3 Doubt Resolutions

Dedicated assistance provided to clarify doubts, featuring two types of instructors: Class Instructor and Lab Instructor.

4 Projects

Gain a comprehensive understanding of the technology through project work, guided by your instructor.

Why INCAPP Coding Institute

Outstanding students deserve the finest learning environment. At INCAPP, we guarantee a superior learning experience and personalized support to ensure your success.

Top-Notch Classroom with Expert Instructor

Comprehensive Study Materials

Continuous Feedback and Monitoring

Guaranteed Course Completion

Project-Based Learning

Course Completion Certification

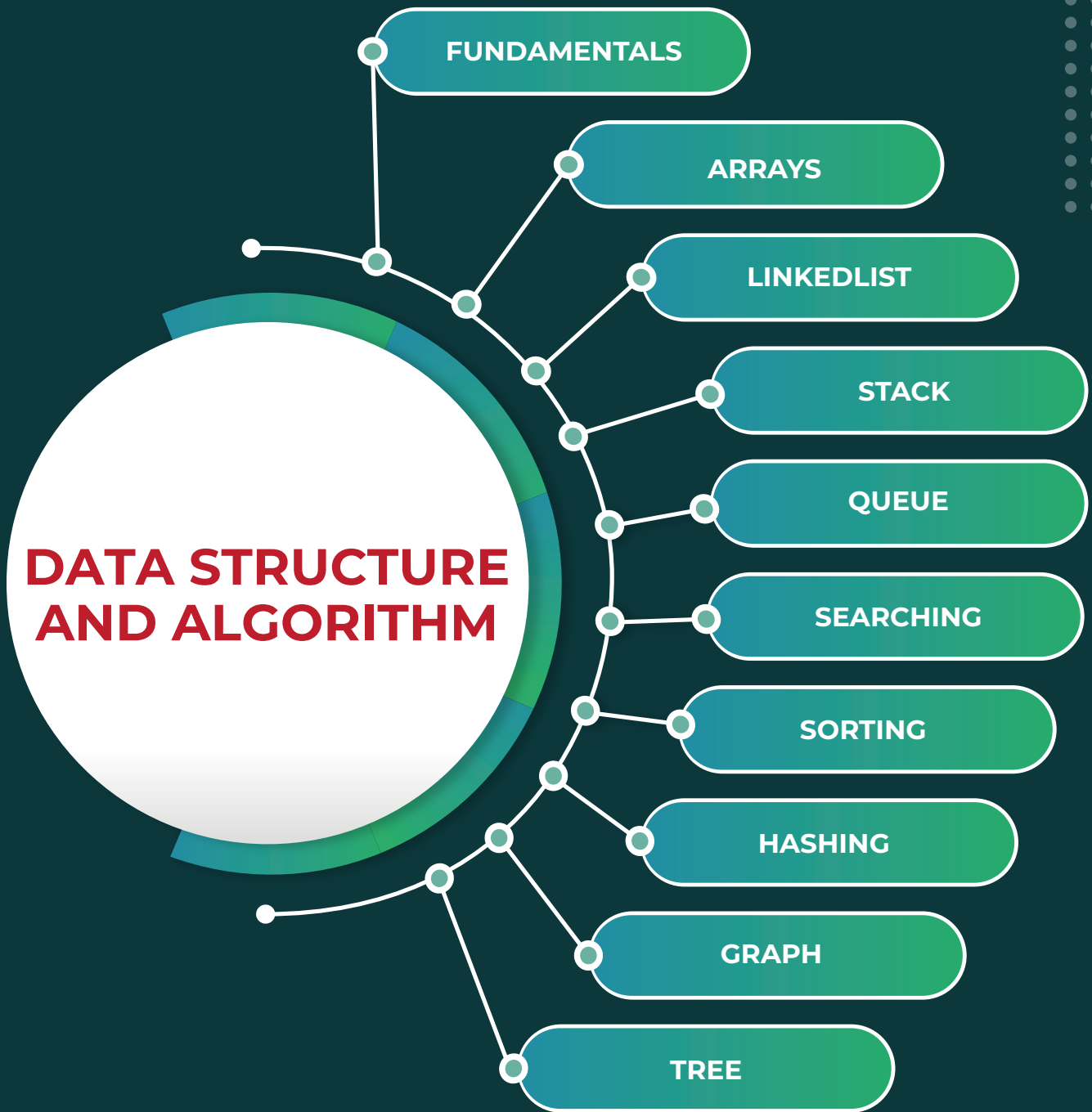**Dedicated Support for Doubt Resolution**

Placement Assistance

Individual Attention to Each Student

In-Class Assignment Sessions

What You Will Learn

FUNDAMENTALS

ARRAYS

LINKEDLIST

STACK

QUEUE

SEARCHING

SORTING

HASHING

GRAPH

TREE

DATA STRUCTURE AND ALGORITHM

PROBLEM SOLVING

5 Reasons To Learn DSA

Problem-Solving Skills: Enhances your ability to tackle complex problems logically.

Efficiency in Coding: Helps in writing more efficient and optimized code.

Essential for Technical Interviews: Crucial for performing well in coding interviews.

Understanding of Algorithms: Aids in understanding and implementing algorithms effectively.

Foundation for Advanced Computing: Provides a strong base for learning advanced topics like AI and machine learning.

Course Overview:

Data Structures and Algorithms are fundamental concepts in computer science used for efficiently organizing, managing, and processing data. Data structures like arrays, linked lists, trees, and graphs enable efficient data storage and retrieval, while algorithms provide step-by-step procedures for solving problems and performing computations. Their study is crucial for developing optimized and efficient software solutions, crucial for tasks like data analysis, problem-solving, and system design. Understanding these concepts is essential for any programmer or software engineer to write better-performing and resource-efficient code.

DSA

Introduction to Data Structure and Algorithm

- Introduction to Data Structures and Algorithms
- Types of Data Structures
- Types of Algorithm
    - Simple Algorithm
    - Condition Algorithm
    - Iterative Algorithm
    - Recursion and Recursive Algorithm
- Time and Space Complexity
- Operations on DS

Problem Solving

Arrays

- Array Introduction
- Insertion Operation
    - Insertion at the End
    - Traversing an array
    - Insertion at the specified index
- Deletion Operation

- Deletion from the End
- Deletion from the specified index

Problem Solving

Linked List

- Introduction to Linked List
- Types of Linked Lists
  - Singly Linked List
  - Singly Circular Linked List
  - Doubly Linked List
  - Doubly Circular Linked List
- Introduction to Singly Linked List
  - Traversing nodes
  - Insertion at the End node
  - Insertion at Begin node
  - Insertion at Specified node
  - Deletion from the End node
  - Deletion from the Begin node
  - Deletion of Specified node
- Introduction to Singly Circular Linked List
  - Traversing nodes
  - Insertion at the End node
  - Insertion at Begin node
  - Insertion at Specified node
  - Deletion from the End node
  - Deletion from the Begin node
  - Deletion of Specified node
- Introduction to Doubly Linked List
  - Traversing nodes
  - Insertion at the End node
  - Insertion at Begin node
  - Insertion at Specified node
  - Deletion from the End node
  - Deletion from the Begin node
  - Deletion of Specified node
- Introduction to Doubly Circular Linked List
  - Traversing nodes
  - Insertion at the End node
  - Insertion at Begin node
  - Insertion at Specified node
  - Deletion from the End node
  - Deletion from the Begin node

Deletion of Specified node
Problem Solving

Stack

- Introduction Stack
- Operations on Stack
  - Push
  - Pop
  - Traverse
- Array Stack
- Linked Stack

Problem Solving

Queue

- Introduction to Queue
- Operations on Queue
  - Enqueue
  - Dequeue
  - Traverse
- Array Queue
- Linked Queue
- Circular Queue
- Priority Queue

Problem Solving

Searching

- Introduction to Searching
- Linear Search
- Binary Search

Problem Solving

Sorting

- Introduction to Sorting
- Bubble Sort
- Selection Sort
- Insertion Sort
- Radix Sort
- Counting Sort
- Quick Sort
- Merge Sort
- Heap Sort

Problem Solving

Hashing

- Introduction to Hashing
- Collision in Hashing
- Collision Resolution
- Hashtable
- Operations on Hashtable
  - Creation
  - Insertion
  - Traversing
  - Deletion
  - Searching

Problem Solving

Graph

- Introduction to Graph
- Graph Representation
- Graph Traversal

Problem Solving

Graph Algorithm

- Breadth First Search (BFS) Algorithm
- Depth First Search (DFS) Algorithm
- Minimum Spanning Tree
- Greedy Algorithms
  - Kruskal's Algorithm
  - Prim's Algorithm
- Dijkstra's Algorithm

Problem Solving

Tree

- Introduction to Tree
- Examples of Tree
- Binary Tree Traversal
  - In-order Traversal
  - Pre-order Traversal
  - Post-order Traversal
- Examples of Binary Tree Traversal
  - Full Binary Tree
  - Perfect Binary Tree
  - Complete Binary Tree
  - Degenerate or Pathological Tree
  - Skewed Binary Tree
  - Balanced Binary Tree
- Binary Search Tree (BST)

Problem Solving

Our Impact

12800+ Students Successfully Trained	**13+** Years of Experience
99% Students Recommend Us to Their People	**100%** Course Completion Rate
100+ Projects Developed	**4.9/5** Google Rating

What our students say about us

Isha

" I had learned core java, web developement, advance java from the Rahul sir and i am very grateful to him for giving us the best knowledge. "

Vishal Kumar

" I did web designing course by Incapp and this is the best institute in G.Noida. It has really helped me understand and feel more confident in what I am doing. Thanks Rahul sir. "

Pratyush Mishra

" The class is well maintained and i like what mam teaches us. We have learned programming language. Thankyou INCAPP for best coding experience. "

Khushi Mundra

" The environment of coaching is very good. Notes, PDFs, & books everything is provided. Notes are really very nice. Overall, coaching is very good. "

Anand Kumar

" Incapp is a best institute for coding, here staff is very supportive and our Praveen Chauhan Sir explain every topic very well. "

Kartik Chauhan

" I had a fantastic learning experience at Incapp! The instructors were highly knowledgeable and skilled in their respective fields. I would highly recommend Incapp to others. "

Our Students Are Place In

Pepcoding

FUJITSU

T.EN TECHNIP ENERGIES

VALUE CODERS

unthinkable

Ecom Express

ugam
POWERING ANALYTICS INTO ACTION

NTT DaTa

SERVOSYS

wipro

tcs

Infosys

Paytm

Capgemini

cognizant

> Everyone should learn how to program a computer, because it teaches you how to think.
>
> - **Steve Jobs**

> All of my friends who have younger siblings who are going to college or high school - my number one piece of advice is: You should learn how to program.
>
> - **Mark Zuckerberg**

FAQ's

What are the criteria for admission?
No criteria, anybody who has an interest in coding can join.

Do you Provide Study material?
Yes, Immerse yourself in a superior learning experience with study materials meticulously crafted by our expert instructors.

Do I need to be good at maths to complete this program?
No, Only your dedication and ambition about learning is needed.

Do I get a certificate after course completion?
Yes. Upon successful completion of the course, you will be awarded a prestigious certificate that validates your achievement.

Is coding difficult?
No, it is not difficult. Coding is fun and challenging as you learn to create apps, games, websites, and lots more out of your creativity.

Are there tests/exams in the program?
Yes, In between the course, your instructor conducts the test to monitor your performance.

Courses we offer

Java Language	**Oracle Certified Foundation Associate**	**Data Structure & Algorithms**
Spring Boot Framework	**Website Development**	**Python Language**
Data Science	**Django Framework**	**C Language**
C++ Language	**Coding Foundation Program**	**Full-Stack Software Development**
React JS	**Node JS**	**MERN**

incapp®
The CODING Institute

Are you ready to transform your career?

Our course may be demanding, but the incredible transformation
you can experience will make it all worthwhile!

✓ Get In Touch

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