



CLASS 12
TAMIL NADU
STATEBOARD
COMPUTER
SCIENCE

**BRAINSHINE
ACADEMY**

Online
**HOME
TUITIONS**



9080138609

www.brainshineacademy.com

BRAINSHINE ACADEMY



How Our Online Tuition Works

Book a Free Consultation:

Start by filling out our online form or contacting us. We'll understand your needs and match you with the right tutor.

Customized Learning Plan:

After assessing your requirements, we create a personalized lesson plan that works best for you.

Live Sessions:

Engage in interactive live sessions with your tutor via video conferencing tools. You'll be able to ask questions, get instant feedback, and track progress in real-time.

Study Materials & Homework Help:

Receive study materials, practice worksheets, and homework support to reinforce your learning.

Progress Tracking:

Regular feedback and progress reports will help you stay on track and achieve your learning goals.

CLASSES WE OFFER

ONE-TO-ONE:

We allocate one teacher to only one student so that the student interact with teacher and learn the concepts thoroughly.

GROUP CLASS FOR 5 STUDENTS:

We allocate one teacher for group of 5 students. This promotes friendly competition and interactive classes while simultaneously maintaining an individual learning experience for each student.

GROUP CLASS FOR 10 STUDENTS:

We allocate one teacher for group of 10 students. All the features are the same as above group class and it is cost effective.

GOAL:

Make the students master the concepts deeply.

PRACTICE STYLE:

Let the students understand the concepts through explaining with real time examples.

TEACHING APPROACH:

Teacher cues the student to discover the answer.

The teachers here are highly experienced and well-qualified, having graduated from prestigious institutions such as IIT, NIT, IIIT, CLRI, Anna University, and others. Their expertise and strong academic background contribute significantly to the high-quality education provided.



What We Do?

At Brainshine Academy, we offer comprehensive range of online tutoring services designed to support students at every stage of their academic journey.

Why choose us?

Personalized learning: We provide tutoring sessions to each student's unique needs, learning style, and pace. Our tutors adapt their methods to ensure every lesson is both engaging and effective.

Test Preparation & Exam Strategies: Our test preparation services focus on strategy, practice, and review to help you succeed in your exams.

Progress Monitoring & Feedback: We track your progress and provide regular updates on your improvement. Our tutors give constructive feedback, recommend areas for further growth, and ensure you stay on track to meet your academic goals.

Homework Assistance: We offer tutoring sessions to support you with school projects, essays, and homework.



COMPUTER SCIENCE CURRICULUM

| Topic | Sub Topic | No. of Classes |
|------------------------------------|--|----------------|
| Function | Introduction To function, function with respect to programming language, Interface Vs Implementation, Pure Functions | 3-4 |
| Data Abstraction | Introduction to data abstraction, Tuples and Lists, representation of abstract data type using rational numbers, Abstract data types, Constructors and selectors, Data abstraction in structure. | 3-4 |
| Scoping | Introduction to scoping, Variable scope, LEGB Rule, Types of variable scope, module. | 3-4 |
| Algorithmic Strategies | Introduction to algorithmic strategies, complexity of an algorithm, efficiency of an algorithm, algorithm for searching techniques, sorting techniques, Dynamic programming. | 3-4 |
| Python-Variables and Operators | Introduction to Python, Key Features of Python, Programming in Python, Input and output functions, Comments in python, Indentation, token, python data types. | 3-4 |
| Control Structures | Introduction to alternative or branching, control structure | 3-4 |
| Python Functions | Introduction to python functions, defining functions, Calling/invoking a function, passing parameters in functions, function arguments, anonymous functions, The return statement, variable scope, functions using libraries, python recursive functions. | 3-4 |
| Strings and String Manipulation | Introduction to strings, creating strings, assessing characters in a string, modifying and deleting strings, string operators, string formatting operators, formatting characters, format () function, built-in string function, membership operators, programs using strings. | 4-5 |
| Lists, Tuples, Sets and Dictionary | Introduction to lists, tuples, introduction to dictionaries, introduction of sets. | 4-5 |

COMPUTER SCIENCE CURRICULUM

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|---|--|-----|
| Python Classes and Objects | Introduction to python classes and objects, defining classes, creating objects, accessing class members, class methods, constructor and destructor in python, public and private data members, sample program to illustrate classes and objects. | 4-5 |
| Database Concepts | Data and information, database, database management system software, database structure, data model, difference between DBMS and RDBMS, types of relationships, relational algebra in DBMS. | 4-5 |
| Structured Query Language (SQL) | Introduction to SQL, Role of SQL in RDBMS, Processing skills of SQL, Creating database, components of SQL, Data types, SQL Commands and their functions, | 3-4 |
| Python and CSV Files | Introduction to Python and CSV Files, Difference between CSV and XLS File formats, purpose of CSV File, creating a CSV File using Notepad, create a CSV File using microsoft Excel, Read and write a CSV File using Python, writing data into different types in CSV Files | 3-4 |
| Importing C++ Programs in Python | Introduction to Python and C++, scripting language, applications of scripting languages, features of Python over C++, Importing C++ Files in Python, Python program to Import C++, Python program executing C++ Program using control statement, how python is handling the errors in C++, Python program executing C++ Program containing arrays, Python program executing C++ Program containing functions, python program to illustrate the inheritance of a class. | 4-5 |
| Data Manipulation through SQL | Database, SQLite, Creating a database using SQLite, SQL Query using python, The SQL and, or andNot operators, Querying a Date Column, Aggregate Functions, updating a record, Deletion operation, data input by user, using multiple table for querying, integrating query with CSV File, Table list | 4-5 |
| Data Visualization Using Pyplot: Line Chart, Pie Chart, Bar Chart | Data visualization definition, getting started, special plot types | 3-4 |

WHAT STUDENTS SAY

Y

★★★★★

- by Yuvaraj
attended BTech Tuition
posted on 04 Jul, 2018

"Vastly experienced, Elusive teaching, clears doubt on par to the student capacity, motivating person."

R

★★★★★

- by RAJAVIKNESH
attended Class 11 Tuition
posted on 04 Jul, 2018

"Excellent in teaching. Level of teaching is totally well and good. I recommend. Tutor is having good knowledge on teaching the subjects. Especially I get support whenever I needed."

R

★★★★★

- by Rajesh
attended Class 10 Tuition
posted on 04 Jul, 2018

"Way of explaining the concepts is very good. Theoretical as well as technically good."

G

★★★★★

- by GEETHA BIMALRAJ
attended Class 9 Tuition
posted on 05 Jul, 2018

"Excellent tutor. Very dedicated and thorough in teaching. Has been teaching for the last three years and have not had any issues. definitely recommended."

T

★★★★☆

- by Thamim Fathima Nisha.A
attended BTech Tuition
posted on 12 Jul, 2018

"Very good. He is more interactive with us. He teaches us more concepts clearly. He clears our doubts without any hesitation."



★★★★★

- by Pavi

attended **Class 12 Tuition**

posted on 24 Sep, 2019

"Best one for all subject well experience in all subjects daily tests and clearing doubts with an example soon. "



★★★★★

- by Saravanan

attended **Class 10 Tuition**

posted on 24 Sep, 2019

"Good mentor. Really helped in my exam preparation. Thank you sir for being my tuition teacher. "



★★★★★

- by Bharathi

attended **Class 10 Tuition**

posted on 24 Sep, 2019

"Rajavel sir is very kind and humble. He won't scold if done a mistake. We can easily understand when he teaches. He will teach us a line by line. He is the best teacher I have ever seen in my life. "



★★★★★

- by Sathidevi S Raj

attended **Class 10 Tuition**

posted on 25 Sep, 2019

"Very polite and humble. Makes the student understand the concepts in easiest way and spends quality time with student. Student is very comfortable. "



thank
you

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class-12-tn-state-board-computer-
science/](https://brainshineacademy.com/course/class-12-tn-state-board-computer-science/)

BOOK A DEMO

To book a demo, simply visit our website and click the option "Schedule Demo class" and fill out the form. Our team will get in touch with you to schedule a convenient time for the demo.

"We motivate the students to build skills and develop confidence as they pursue educational success."