

# C PROGRAMMING FULL COURSE



[www.gteceducation.com.sg](http://www.gteceducation.com.sg)

## Course Overview

The course covers basic to advanced concepts of C programming. This course is a collection of examples and case studies. The course is designed with more advanced hands on practices and exercises.

<b>Entry Requirement</b>	: Basic computer knowledge
<b>Course Duration</b>	: 30hrs
<b>Mode of Training</b>	: Face to face Instructor led Training
<b>Materials</b>	: Course books will be provided to each participant

## Course Content

### Module 1: Introducing the C Language

- Defining the C language
- Exploring basic C concepts
- Character Sets and Tokens
- Developing a Simple C Program

### Module 2: Fundamentals of C Programming

- Exploring Data Types
- Introducing Constants and Variables
- Declaring and Initializing Variables
- Introduction to Const and Volatile Type Qualifiers
- Explaining Data Type Modifiers

1 Sophia Road, #02-03, Peace Centre, Singapore 228149.

Phone: 63360244, 9650 3505, Email: [Info.sg@gteceducation.com](mailto:Info.sg@gteceducation.com)

Registered with Committee for Private Education (CPE) is part of SkillsFuture Singapore (SSG)

### **Module 3: Managing Input and Output**

- Input/output Functions
- The printf() function
- The printf() place holders
- Escape Sequence
- The scanf() function
- The getchar() function
- The gets() function
- The putchar() function
- The puts() function

### **Module 4: Working with Operators**

- Working with Operators
- The Unary Operators
- The Assignment Operators
- The Arithmetic Operators
- The Increment/Decrement Operators
- The Relational Operators
- The Logical Operators
- The Bitwise and Conditional Operators
- The Special Operators
- The Shorthand Assignment
- Operator Precedence in C

### **Module 5: Control Structures**

- Exploring the syntax of a control structure
- Working with Conditional Statements
- Working with Iterative Statements
- Working with Jump Statements

### **Module 6: Arrays and Functions**

- Introducing Arrays
- Working with One-Dimensional and Two-Dimensional Arrays
- Limitations of Arrays
- Working with Functions (Function Definition and Invocation)
- TypesOf Functions
- Built-in Functions
- User-defined Functions
- Parameter passing mechanisms
- Passing Arrays in Function
- Local and Global Variables
- Static and Register variables

### **Module 7: String Handling in C**

- Understanding Strings in C
- Declaring and Initializing a String
- Reading and Displaying the Strings
- Creating an Array of Strings
- Performing String Operations
- Using various String Handling Functions

### **Module 8: Pointers**

- Understanding Pointers
- Declaring a Pointer Variable
- Using the Address of (&) Operator
- Initializing a Pointer Variable
- Dereferencing a Pointer
- Performing Operations on Pointers
- Working with Functions and Pointers
- Working with Arrays and Pointers
- Pointers to One –Dimensional Arrays
- Pointers to String
- Allocating Memory at Runtime

### **Module 9: Building Structures**

- What is a structure?
- Defining type structures
- Nesting structures
- Arrays and Pointers in structures
- Pointing to structures
- Arrays of structures
- Passing structures to functions
- What is a union?
- Arrays of Union
- Unions inside structures
- Pointing to unions

### **Module10: Working with Preprocessor Directives**

- Using the File Inclusion Directives
- Using the MacroSubstitution Directives
- Defining a Simple Macro
- Defining Macro with Arguments
- Defining Nested Macros
- Using the Compiler Control Directives

### **Module 11:Data File Processing in C**

- Exploring Data Files
- Opening and Closing Files
- Reading from files
- Writing to files
- Accessing Data Files Randomly

## Student's Testimonial

**C programming-**"The institution is **well organized and show good response. C advance** course covered all the relevant topics well."

**College Student, Singapore**

**C Programming Course-**"It is interesting for everyone to join the class .**Good environment for learning.**"

**Wong Ngit Min ,Logicode Pte Ltd,Technical Support Enginner, Singapore.**

**C Programming Course-**"Student teacher ratio is very good. Explanation and doubt clearing was **very good and understandable**".

**College Student, Singapore**

**Vb.Net Programming Course-** "The VB.Net advanced training form G-TEC is **very detailed** and interesting training. The **trainer is patient** and willing to share her knowledge. I will definitely recommend to my colleagues and friends."

**Stanley,Philips Electronics Singapore Pte Ltd, Engineer**

**C#.Net Programming Course-**"C#.Net Training from G-TEC gives me the **full picture of this programming in short period. Both theory and practical works are well learned** though I need more practical practice."

**Leica Instruments (S) Pte Ltd, R & D.**

**Java/J2EE Programming Course-** "This is the **best institution I found in Singapore.**Because here the trainer as well as training was good. The **trainers are very good** because if we have any doubts they are giving clarification through mail even after the course completed (Java/J2EE)".

**Comdo 2000 Pte Ltd, Software Engineer**

**C#.net Programming Course-**"G-TEC provides a **good trainer** qualified. It was a **good learning experience** in G-TEC for C#.net".

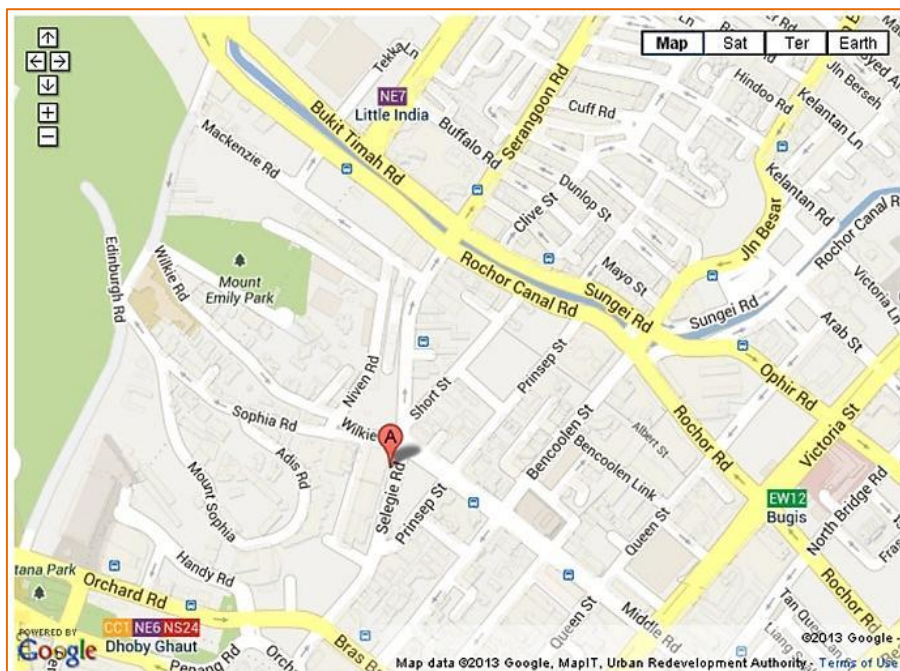
### Our Clients

Singapore Airlines, Bosch, Ministry of Home Affairs, Seagate, Land Transport Authority, NETS , Inland Revenue Authority of Singapore, Tiger Airways, DSO Laboratories, DHL, Changi Airport Group, DB Schenker, National University Hospital,Gemalto, Thales, Housing Development Board,Philips ,Micron, Surbana International Consultants Pte. Ltd., Singapore Polytechnic, ING Bank, Nanyang Polytechnic, Nanyang Technological University, Genetic Technologies Solutions, Singapore Chemical Industry Council (SCIC), State Bank of India , ST Engineering, Emerson Process Management, Keppel FELS , ST Aerospace, MCI

## Company Profile

<p><b>What We do :</b></p>	<p>G-TEC Computer Education Centre is an Information Technology company in the field of Software Training, Technology Resourcing and Knowledge Consulting. We provide Corporate Training, Project Training, and Customized Training, One to One trainings for professionals, individuals and students.</p>
<p><b>Who are our Customers :</b></p>	<p>We have special teaching methodologies to train people in different categories ranging from corporate clients to school level students. Over 900000 students are certified by G-TEC all over the world. We have the privilege of working with some of the most well-known companies in the world.</p>
<p><b>Where we are :</b></p>	<p>G-TEC Computer Education Centre is the largest computer education networks with more than 510 centers all over the world and corporate office in Singapore. We are operating in Mexico, Qatar, India, Dubai, Singapore, Kuwait, Srilanka and Iran.</p>
<p><b>Our Goal and Focus :</b></p>	<p>Our aim is to make IT education affordable to all sections of society through various projects associating with government's quasigovernment public and private company to reach each and every corner. Our ultimate goal is to achieve cent percentage computer literacy. We are committed to provide 100% quality training to all; our focus is to provide Quality Education World Wide.</p>

## Our Location



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