# C PROGRAMMING BASIC



MAKING PROFESSIONALS GLOBALLY...



#### COURSE OVERVIEW

C is a general-purpose programming language designed for implementing system software and widely used for developing portable application software. This course covers the fundamental programming concepts like data types, managing input and output, working with operators, control structures, functions and arrays. Our theoretical and extensive hands-on exercises will help the participants to get familiarise with basic programming techniques of C.

Entry Requirement : Basic computer knowledge

Course Duration : 16 hrs.

Mode of Training : Face to face Instructor led Training



#### COURSE CONTENT-

### Module 1 Introducing the C Language

Defining the C language
Exploring basic C concepts
Character Sets and Tokens
Compiling, Executing and Developing a simple C Program

### Module 2 Fundamentals of C Programming

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

### Module 3 Managing Input and Output

Input/output Functions
The printf() function
The printf() place holders (Type identifiers, Type prefixes, Field-width, Precision, Flags )
Escape Sequence
The scanf(),getchar(), gets(), putchar(), puts() functions.

### 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 Operators
The Conditional Operators
The Special Operators
The Shorthand Assignment Operators
Operator Precedence in C

#### Module 5 Control Structures

Exploring the syntax of a control structure
Working with Conditional Statements
(The if Statement, The if-else Statement,
Nested if Statements, The if-else Ladder,
The switch Statement,
Nested switch Statements)
Working with Iterative Statements
(The while Loop, The do-while Loop, The for Loop),
Working with Jump Statements (The break
Statement, The continue Statement,
The go to Statement)

### 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)

Types of Functions

Built-in Functions(String manipulation, Memory Management, Buffer manipulation, Character manipulation, Error handling Functions)
User-defined Functions

Parameter passing mechanisms (Call by Value, Call by Reference)

### Module 7 Introduction to Data Structures

Stack Queue



#### **FUNDING AVAILABLE**

#### SkillsFuture Credit

The Singapore Government provides SkillsFuture Credits to all Singaporeans self sponsored (above 25 years) to enhance their knowledge and skills by attending training programs in Singapore.

#### The Skills Development Fund (SDF)

The Skills Development Fund support is used to support workforce upgrading programmes and to provide training grants to companies when they send their employees to attend training. The SDF is administrated by the SkillsFuture Singapore Agency (SSG).

#### STUDENT'S TESTIMONIAL

#### **C Programming**

Thanks for the trainer. After this course, I got an overall idea of what is C programming and how to coding it. I clearly understood many concepts in C language.

Deng Ni, Renesas Electronics Pte Ltd

#### **C#.Net Programming**

"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/Java EE Programming

"The Java/J2ee course material was well presented and very helpful for my work. I really got a great amount out of it. The one to one training was excellent. It met all my expectations. I can even try my hand at getting a SCJP cert now. Thanks to GTEC! ".

Sylvia Lawrence | IBM IT Professional

#### C++ Programming

What I appreciate the most is the trainer's ability to teach a topic that is so comprehensive. She is open to questions and very patient to assist those who are struggling. Definitely would recommend.

Alicia Kurniawan



#### **COMPANY PROFILE**

### What We do:

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.

## Who are our Customers:

We have special teaching methodologies to train people in different categories ranging from corporate clients to school level students. Over 1.5 million 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.

### Where we are:

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, Iran, Malaysia, Saudi Arabia, Bahrain and Ghana.

#### Our Goal and Focus:

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 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.

#### **OUR POPULAR COURSES**

#### **Programming**

Java - Java EE .NET ( C# & Asp) C++ Python

#### Office Skills

MS Excel Excel Advanced MS Powerpoint MS Access

#### Multimedia

Interior Design Autocad Web designing Digital Architect

#### **OUR SERVICE OFFERING**

- ▶ Software Training
- Onsite Training
- Customised Corporate Training
- ► Knowledge Consulting
- Online Training
- Project Training

#### **OUR LOCATION**



#### Nearest MRT

Dhoby Ghaut-Exit A Little India-Exit A Bencoolen-Exit B

#### **Bus Services**

64, 65, 131, 139,147, 166, 857

#### **Nearest Bus Stop**

Peace Centre: 07011

#### G-TEC COMPUTER EDUCATION CENTRE

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

1 Sophia Road, #02-03 Peace Centre, Singapore 228149 Email to :info.sg@gteceducation.com, www.gteceducation.com.sg Phone: +65 63360244 . +65 9650 3505