

دبلوم كمبيوتر لبرمجة الحاسوب Computeach Diploma in Programming

الفئات المستهدفة

- طلاب الثانوية العامة الذين يريدون الانخراط في سوق العمل مباشرة.
- طلاب الكليات والجامعات الذين يريدون تطوير مهاراتهم العملية في مجال برمجة الحاسوب والعمل بوظيفة مبرمج.
- الموظفين الذين يريدون اعتراف برمجة الحاسوب لتطوير الانظمة المستخدمة في مجال عملهم
- أصحاب المؤسسات الذين يريدون بناء وبرمجة أنظمة حاسوبية تخصص مؤسستهم.

أهداف الدبلوم

- تعلم مهارات الحاسوب الأساسية و برامج Microsoft Office والتعامل معها بإتقان.
- تعلم اللغة الانجليزية وكذلك المهارات الأخرى الضرورية لسوق العمل

وصف الدبلوم

يقدم مركز تعليم الكمبيوتر الدولي Computeach برنامج الدبلوم الخاص في مجال برمجة الحاسوب والعديد من برامج الدبلومات الأخرى في مختلف مجالات تكنولوجيا المعلومات، من أجل رفع كفاءة الطلبة المنتسبين وتمكينهم من البرامج التي يتم طرحها ضمن هذا الدبلوم، وتأهيلهم للعمل باحترافية وللوصول إلى درجة عالية من التميز لتحقيق أهداف المؤسسات في هذا المجال.

إن البرامج التدريبية المتخصصة التي يغطيها برنامج الدبلوم الخاص في مجال برمجة الحاسوب تتسم بالحدثة والجودة و ثراء المحتوى والتي تم إعدادها والإشراف عليها من قبل ذوي الخبرة والاختصاص في هذا المجال.

يركز دبلوم كمبيوتر لبرمجة الحاسوب على تجهيز الطالب من خلال تطبيق المواد النظرية في الواقع العملي، بحيث يعمل الطالب كمحترف في مجال الأعمال. كما و تؤهل البرامج المطروحة في هذا الدبلوم الطلبة للحصول على الشهادات الدولية المعتمدة في هذا المجال إذا رغب الطالب في التقدم إليها.



عدد الساعات	المحتويات	مدة الدبلوم
45	Computer Fundamentals-ICDL.	<p>مدة برنامج الدبلوم : سبعة أشهر</p> <p>ثلاث ساعات يومياً من الأحد الى الخميس</p> <p>عدد الساعات الاجمالي: 420 ساعة تدريبية</p>
25	English Language	
10	Soft Skills <ul style="list-style-type: none"> ▫ CV Writing ▫ Presentation Skills ▫ Communication Skills 	
20	System Analysis	
40	Programming basics and logic	
40	Database	
50	Java	
50	C++	
80	VB.NET	
80	C#	

متطلبات التسجيل	مزايا الدبلوم
صورة عن بطاقة الأحوال المدنية للأردنيين	الحصول على شهادة الدبلوم في برمجة الحاسوب من الجامعة و مصدقة من التعليم العالي
صورة عن جواز السفر لغير الأردنيين	الحصول على شهادة الرخصة الدولية لقيادة الحاسوب و المعتمدة من الهيئة الاوروبية لقيادة الحاسوب
صور شخصية عدد- 2	الحصول على شهادة مزاولة مهنة من وزارة العمل

❖ Computeach Programming Diploma- Programming basics and logic

Course Description:

The course fully covers the basics of programming and presents the fundamental notions and techniques used in object-oriented programming. It starts with universal basics, not relying on object concepts and gradually extends to advanced issues observed in the objective approach.

Course Objectives:

- To familiarize the trainee with the universal concepts of computer programming.
- To present the syntax and semantics of the programming languages as well as basic data types offered by the languages.
- To discuss the principles of the object-oriented model and its implementation in the programming languages.
- To demonstrate the means useful in resolving typical implementation problems with the help of standard programming languages libraries.
- To learn how to write code from scratch to achieve a useful application.
- To do your own website and application.

Course Topics:

Topic 1: Absolute basics

- machine and high-level programming languages, compilation process
- logic concepts.
- Integers : values, literals, operators.
- characters: values, literals, operators.

Topic 2: Flow control and more data types

- how to control the flow of the program?
- floating point types: values, literals, operators.
- loops and controlling the loop execution.
- logic, bitwise and arithmetic operators.

Topic 3: Functions

- declaring and invoking functions.
- different methods of passing parameters and their purpose.
- default parameters.
- overloaded functions.

Topic 4: Fundamentals of the object-oriented approach

- class: what does it actually mean?
- where do the objects come from?
- class components.
- Constructors.
- static members.
- classes and their friends.
- defining and overloading operators.

❖ Database

Course Description:

This Course talk about database design and development. Database normalization, data integrity, updates, and data security will also be discussed.

Course Objectives:

- Define and use common databases terminology.
- Determine how data are organized using a database.
- Design (using ERD's) and build databases.
- Access and Manipulate Data in databases.
- Code Queries and other customization routines using SQL.
- Identify the policies of database administration

Course Topics:

Topic 1: Introduction

- Data, Database, Database Management System.
- Data Models.
- Database Languages.

Topic 2: Relational Databases

- Relations and Tables.
- Attributes.

Topic 3: Querying and Manipulating Data

- SQL Data Definition Language.
- Single Block Queries.
- Aggregation.
- Joins and Outer Joins.

Topic 4: Normalize Tables

- Functional Dependence.
- Keys (Primary, Foreign and Secondary Keys).

Topic 4: Database Design

- Entity relational model (ER)

❖ Java

Course Description:

This course teaches students how to develop Java applications. Topics covered include the Java programming language syntax, OO programming using Java.

Course Objectives:

At the end of this course the students must have the ability and enough tools in order to build and run a java application.

Course Outlines:

Topic 1: Programming in Java

- Create a Simple Java Program.
- Define a Simple Class.
- Create and Initialize Variables.
- Write an Expression.
- Work with Arrays.

Topic 2: Controlling Program Flow

- Write If Statements.
- Write a Switch Statement.
- Write a For Loop.
- Write While and Do...While Loops.

Topic 3: Working with Java Class Libraries

- Use the Java Class Library.
- Invoke Attributes of an Object.

Topic 4: Creating Classes

- Define Methods.

- Overload a Method
- Define Constructors
- Create Static Class Members

Topic 5: Implementing Inheritance

- Import a Class.
- Extend a Class.
- Override Methods

❖ C++

Course Description:

In this class, we will learn about C++ programming language such as variables, data types, arrays, pointers, functions and classes etc..

Course Objectives:

At the end of the class, we expect students to have a good understanding about the concept of object-oriented programming using C++, be able to write and read C++ code.

Course Topics:

Topic 1: Introduction

- What is C++?
- Exception Handling.
- Object Oriented Programming.
- Standard Template Library.

Topic 2: Types and declarations

- Booleans.
- Integer Types.
- Floating-Point Types.
- Sizes.

Topic 3: Pointers, Arrays and Structures

- Pointers.
- Arrays.
- Pointers into Arrays.
- Constants.
- References.

Topic 4: Functions

- Function Declarations.
- Argument Passing.
- Value Return.
- Overloaded Function Names.
- Default Arguments.
- Pointer to Function.

Topic 5: Classes

- Classes.
- Constructors.
- Member functions.
- Static members.
- Destructors.
- Member initialization.

Topic 6: Files

- Libraries for files reading and writing.
- Special functions to read and write a file.
- Advanced strings functions.



❖ VB.NET

Course Topics:

Topic 1: Introduction to Visual Basic Programming.

- What is VB.NET.

Topic 2: The Visual Basic Language Essentials

- Data Types.
- Control Statements.

Topic 3 : Procedures, Functions and Event Handlers

- Exceptions and Validations.
- Arrays and Collections.
- Windows Forms, and Controls.

Topic 4: Dialogs Boxes

Topic 5: Object Oriented Programming

- Creating and Using Classes.
- Inheritance.
- Overloading, Overriding.
- Interfaces and Namespaces.

Topic 6: Database Programming

- Data Sources.
- Using ADO.Net
- Dataset, Data Reader.

Topic 7: Forms

- Reading and Writing Files
- Working with Windows Forms
- Working with Multiple Forms
- Handling Mouse Events in Forms.
- Working with Menus.
- Context Menus.

❖ C#

Topic 1 : Getting Started

- Introduction to .NET and the .NET Framework.
- Exploring Visual Studio .NET.

Topic 2 : Understanding C# Language Fundamentals

- Understanding the Fundamentals of a C# Program.
- Using C# Predefined Types
- Writing Expressions
- Creating Conditional Statements
- Creating Iteration Statements

Topic 3 : Creating Objects in C#

- Defining a Class.
- Declaring Methods.
- Using Constructors.
- Using Static Class Members.

Topic 4 : Implementing Object-Oriented Programming Techniques in C#

- Designing Objects.
- Using Inheritance.
- Using Polymorphism

Topic 5 : Building .NET-based Applications with C#

- Examining the .NET Framework Class Library.
- Overriding Methods from System.Object.
- Formatting Strings and Numbers.
- Using Streams and Files.

Topic 6 : Using ADO.NET to Access Data

- ADO.NET Architecture.
- Creating an Application That Uses ADO.NET to Access Data.
- Changing Database Records.

Topic 7 : Creating Windows-based Applications

- Creating the Main Menu.
- Creating and Using Common Dialog Boxes.
- Creating and Using Custom Dialog Boxes
- Creating and Using Toolbars

- Creating the Status Bar.
- Creating and Using Combo Boxes.

