

Syllabus for Advanced Diploma in Information Technology (ADIT)

Sr. No.	Module Name	Hours
1	Fundamental of Programming	20
2	Operating System	20
3	Database Programming Using SQL Server	36
4	VB .NET as Front End	60
5	Web Application Development	32
6	Project	48
	Total	216

Course Duration: 216 hours

Course Contents:

Fundamentals of Programming (20 hrs)

Algorithms
 Data Representation
 Boolean Algebra
 Concepts of Flowcharting
 Creating Flowcharts
 Arrays
 Introduction to File Structure

Operating system Concepts (20 Hrs)

What is an OS?
 Processes
 Memory management
 File Systems
 General OS architecture
 Scheduling & Synchronization
 Virtual Memory and Paging
 Threading concepts

Database Programming Using SQL Server (36 hrs)

RDBMS Technologies
 Database Design
 Normalization Techniques
 ER Diagrams
 SQL, PL/SQL Queries
 Database Security

VB .NET as Front End

(60 hrs)

. NET Overview
. NET Framework
Visual Studio .NET
MSIL (Microsoft Intermediate Language)
CLR (Common Language Runtime)
Introduction to SOAP (Simple Object Access Protocol)
Preprocessors

Delegates and Events
Unsafe Code
Namespaces & Assemblies
Reflection and the Type class
Versioning
Attributes
Collections

VB .NET Technology

Event Driven programming
Form object
Data Types & Operators in VB
User Interface and control names
Procedures and functions
Modules and scopes
VB.Net Objects and Methods
Exception Handling
Classes
Inheritance, Polymorphism
Class Libraries
Interfaces & Abstract Classes
Delegates and Events
Intrinsic controls in VB .NET
Common controls in VB
User interface design (MDI & SDI Models)
Dates, Strings, Array, Collections
Structures
Working with Databases
Data Base Connectivity

Web Application Development

(32 hrs.)

Developing Web Applications using
Front Page
Interdev
Introduction to Web Applications using Visual Basic

Project

(48 hrs.)