



ADSE

Advance Diploma In Software Engineering



A diploma in software engineering is a specialized educational Program that provides students with practical skills and knowledge In the field of software development and engineering. This type of Diploma typically focuses on teaching students the fundamentals of Software design, development, testing, and maintenance.

Course Duration :- 12 MONTHS

Sem - 1: Web Programming

HTML 5

- Intro To Html
- Html Elements
- Text Formatting
- Lists In Html
- Img Tag
- Marquee Tag
- Iframe Tag & Frameset Tag
- Html Table Tag
- Internal And External Hyperlink In Html
- Image Mapping

CSS 3

- Css Properties
- Css Styling
- Working With Block Elements And Objects
- Css Class Selectors
- Div Tags, Id Selectors, And Basic Page Formatting
- Borders, Border-radius, Border Images, Backgrounds, Background Size, Background-origin, Text Effects,
- Transition Animation In Css

Javascript

- What is JavaScript?
- History of JavaScript
- Variables
- Operators
- Expressions
- Statements
- Functions
- What are objects?
- Creating objects
- Accessing object properties
- What are arrays?
- Creating arrays
- Accessing array elements
- String properties
- Array methods
- Array iteration

J-query & Xml

- What is jQuery ?
- Adding the jQuery Library to Your Pages
- Basic jQuery Example
- Downloading jQuery
- Alternatives to Downloading jQuery Syntax
- What is markup? (Markup = Tagging)
- What are the similarities between HTML and XML
- Is XML is Replacement for HTML
- What are the differences

Sem - 2: Core Programming

C Language

- Programming Languages
- Types of software
- constants
- Data Types
- Variable Declaration
- Variable Assignment
- Arithmetic expressions
- Evaluation of expressions
- Relational operators
- Logical operators

C++

- Introduction to C++
- Different paradigms of problem solving
- POP vs OOP
- Constants
- Variables
- Keywords
- Data types
- Declaration of Variables
- Output Stream (cout) & Manipulators
- Input Stream (cin)

C#

- Learn the fundamentals of C# programming in Visual Studio.
- Using .Net Framework
- Working with variables, data types
- Work with standard programming skills
- Exception Handling in C#
- Object oriented programming in C#
- Object oriented techniques
- Working with Arrays
- Create Generic classes and methods.

Sad (System Analysis & Design)

- Asymptotic Notations And Analysis, Divide And Conquer Strategy, Greedy Methods, Dynamic Programming, Basic Graph Algorithms, Np-completeness, And Approximation Algorithms.
- Functions
- Using Multiple Libraries
- JQuery – Noconflict() Method
- Systems Analysis
- Conceptual Design

Sem - 3: Java Specialist

SQL

- Learn Database models
- Overview of SQL Server Management Studio and Transact-SQL language
- Master writing simple and complex queries that retrieve data from the database
- Calculate information across result sets using aggregate queries (sum, min, max, avg, etc.)
- Insert, update, and delete data
- Retrieve data from tables

Sem - 4: Development

PHP

- Learn Database models
- Overview of SQL Server Management Studio and Transact-SQL language
- Master writing simple and complex queries that retrieve data from the database
- Calculate information across result sets using aggregate queries (sum, min, max, avg, etc.)
- Insert, update, and delete data

Sem - 5: Android Developer

Introduction Of Android

- Overview of Android
- Java Editions and comparison with Android
- Android Apps – Design, Vendor, Behavioral Classification
- Use Android SDK's Emulator to test and debug applications
- Construct user interfaces with built-in views and layouts
- Define custom view and layout

Android Components

- Activity: A screen that represents the user interface
- Service: A component
- Broadcast Receiver: A component that can respond to a broadcast message sent by a client
- Content Provider: A component
- Adapters
- Complex UI components
- Menus and Dialogs
- Tabbed Activities
- Navigation Drawer

Core Java

- Introduction to Java and OOPS
- Java Tokens- Comments, Identifiers, Keywords, Separators
- Working with Java Editor Softwares – Editplus, NetBeans, Eclipse
- Packages with static imports
- Working with jar
- Modifiers – File level, Access level and Non-access level
- Datatypes, Literals, Variables, Type Conversion, Casting & Promotion

My SQL

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- Reading runtime values from

Android Web Development

- Understanding Web Services
- Web Services Architecture
- Building Server side components
- Publishing web services
- REST based web services
- Accessing Web Services
- Overview of networking
- Checking the network status and web service status
- Working with HTTP to access the web services Publishing content providers

Appwidget Data Handling Android

- Working with Intents
- Explicit and implicit intents
- Using Intents as messaging objects
- Intents to start components expecting results
- Storage Model selection criteria
- Shared preferences
- Internal Storage – Files
- External Storage – SD Card
- Testing the created files, tools

Advance Java

- About Java Platforms
- Applications of Java
- About API (Application Programming Interface)
- Static Blocks
- Introduction to interfaces
- Runtime Polymorphism
- Conditional operators
- File management system
- Disadvantages of File management system
- Approach-2 X/Open standards

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- Introduction to interfaces
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- File management system
- Disadvantages of File management system

Building the User Interface

- Creating the Activity
- XML versus Java UI
- Selection Widgets, Using fonts
- Common UI components
- Handling UI events: a bit about listeners
- What is material ?
- Material properties and Styling / Animations
- Material Patterns
- Overview of Android Resources

Background Services

- Overview of Android services
- Service lifecycle
- Declaring a service
- Registering a service
- Starting and stopping a service
- Threads and other concurrency considerations with services
- Bound versus unbound services
- Remote versus local services
- Using Location Manager, Location Provider