



# IDM TECHPARK

GUIDE'S FOR PERFECT CAREER PATHWAY



# PHP Course Syllabus



**N.S.D.C.**  
National  
Skill Development  
Corporation



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# About Us

IDMTECHPARK global retail & corporate training solutions provider in Coimbatore, Erode, Trichy & Salem that offers a comprehensive range of training and placement services for both fresher's and professionals seeking new opportunities. The company commenced its IT training business in 2016. A pioneer in IT education, over the years, we have trained over 50k students. Idmtechpark has a wide range of courses, maintains education standards & provides placement assistance.

[www.idmtechparkcoimbatore.com](http://www.idmtechparkcoimbatore.com)  
[www.idmtechparkeroode.com](http://www.idmtechparkeroode.com)

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# About IDMTECHpark Education Quality

IDMTECHPARK is managed and developed by industry specialists with more than 8 years of expertise in the field. IDMTECHPARK offers a staff of highly skilled professional trainers who deliver effective IT training in a friendly setting, concentrating on the needs of each individual to help them succeed in a demanding work world. In the book of career and success, our staff never leaves a page unturned.

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IDMTECHPARK's versatile instructor-led training class rooms and lower-class sizes enable people to engage more easily and absorb knowledge, resulting in remarkable results for both themselves and the organizations for which they work. Our training programmes are adaptable and customizable to ensure that each participant gets the most out of their time with us. IDMTECHPARK focuses in providing hands-on IT training in over 30 different courses.

- We teach in-demand courses
- We provide impactful learning material
- Our teachers are well-selected & trained
- We follow world-class teaching methods
- Our courses include E-Projects
- We conduct technical workshops
- Exams are held and based on Exams providing Certification
- Certificates are recognized the world over
- Our course timings are flexible



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# Our Recent Placement

Idmtechpark assists students in getting job placements on successful completion of their courses. Idmtechpark also provides recruitment assistance to organizations. Idmtechpark students are shortlisted based on the organization's requirement. To make students job-ready, Idmtechpark conducts workshops e.g. How to do Group Discussions, how to behave in a Personal Interview. From time to time, job fairs & campus recruitments are conducted. Workplace skills such as time management, making effective presentations and communication skills are also provided. All this helps students find appropriate jobs in the IT industry while also helping save companies recruitment costs.

**Krishnaveni M**

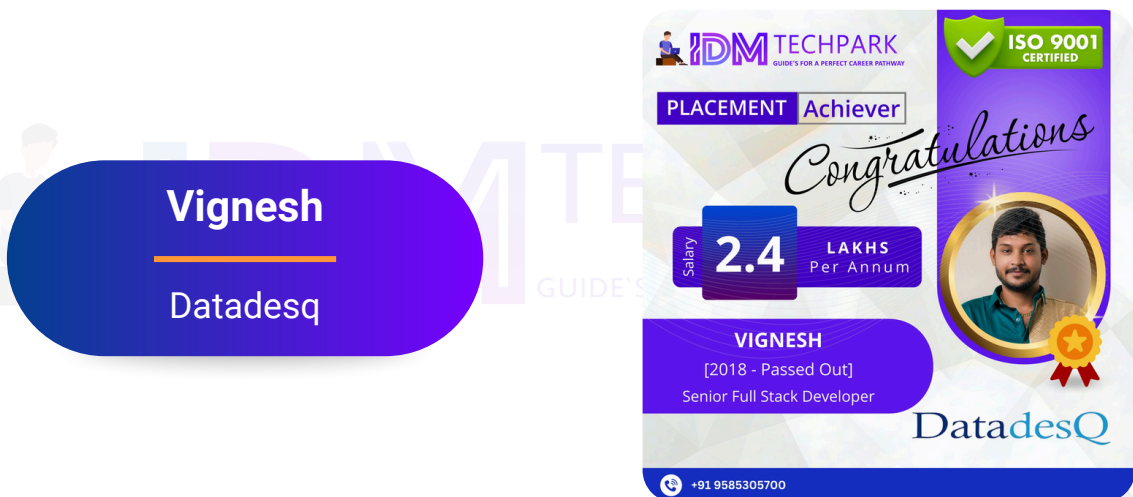
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Xccessor



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Accenture

**Keerthana**

AJS



**Brindha Boopathi**

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**Gowthami**

Genpact



**Surya**

ZUCI

**Pavithra**

Vel Info Tech



**Poovitha**

Gray Matter



**Ramesh**

TDT

**Siva Sankar**  
ST Cloudspark tech



**Nabeel Hisham**  
VTail



**Kalayarasan**  
Violet Infotech

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# Our Alumni Working At



## MODULE 1

# Introduction to PHP

- Overview of PHP and its History
- Installing PHP and Setting Up a Local Development Environment
- Understanding PHP Syntax
- Writing and Running Your First PHP Script
- PHP Tags and Embedding PHP in HTML

## MODULE 2

# PHP Variables and Data Types

- Declaring and Using Variables in PHP
- Data Types in PHP (String, Integer, Float, Boolean, Array, Object, Null)
- Type Casting and Type Conversion
- Constants in PHP (Define and Const)
- PHP Variable Scope (Global, Local, Static)

## MODULE 3

# Operators in PHP

- Arithmetic Operators in PHP
- Comparison Operators (Equality, Inequality, Greater Than, Less Than)
- Logical Operators (AND, OR, NOT)
- Assignment Operators
- Increment and Decrement Operators
- String Operators

## MODULE 4

# Control Structures in PHP

- Conditional Statements: if, else if, else, switch
- Working with Loops: for, while, do-while, foreach
- Using break, continue, and return in Loops
- Combining Conditions with Logical Operators
- Handling Errors with try, catch, and throw

## MODULE 5

# Functions in PHP

- Defining and Calling Functions
- Function Parameters and Return Types
- Variable Scope and Global Variables
- Default Arguments in Functions
- Function Overloading and Recursion
- Anonymous Functions and Lambda Functions

## MODULE 6

# Arrays in PHP

- Introduction to Arrays: Indexed Arrays, Associative Arrays, and Multidimensional Arrays
- Array Functions: `array_push()`, `array_pop()`, `array_shift()`, `array_unshift()`, etc.
- Sorting and Filtering Arrays in PHP
- Using foreach Loop with Arrays
- Array Mapping and Reducing Functions

## MODULE 7

# Superglobals in PHP

- Introduction to Superglobal Arrays
- The \$GLOBALS Array
- \$\_GET, \$\_POST, \$\_REQUEST, \$\_SERVER, \$\_FILES, \$\_COOKIE, \$\_SESSION
- Handling Form Data with \$\_GET and \$\_POST
- Sanitizing and Validating User Inputs

## MODULE 8

# File Handling in PHP

- Opening, Reading, and Writing Files in PHP (fopen(), fread(), fwrite())
- File Uploading and Handling Files
- Working with Directories and File Permissions
- File Streams and Binary Data Handling
- File and Directory Operations (copy(), rename(), unlink())

## MODULE 9

# Object-Oriented Programming (OOP) in PHP

- Introduction to OOP and Classes in PHP
- Creating and Using Classes and Objects
- Constructor and Destructor Methods
- Instance Variables and Methods
- Access Modifiers: Public, Private, Protected
- Static Properties and Methods

## MODULE 10

# Inheritance and Polymorphism

- Understanding Inheritance in PHP
- Overriding Methods in Subclasses
- Using parent:: to Access Parent Class Methods
- Polymorphism in PHP
- Interfaces and Abstract Classes in PHP

## MODULE 11

# Namespaces and Autoloading

- Introduction to Namespaces in PHP
- Using namespace to Organize Code
- Autoloading Classes with `spl_autoload_register()`
- Composer Autoloading and PSR-4 Standard
- Best Practices for Namespaces and Autoloading

## MODULE 12

# Error Handling and Exceptions in PHP

- Introduction to Error Handling in PHP
- Using try, catch, and finally for Exception Handling
- Throwing Custom Exceptions with throw
- Custom Error Handling with set\_error\_handler()
- Logging Errors in PHP

## MODULE 13

# PHP Sessions and Cookies

- Understanding Sessions in PHP
- Starting and Destroying Sessions (session\_start(), session\_destroy())
- Storing and Retrieving Session Variables
- Using Cookies in PHP (setcookie(), \$\_COOKIE)
- Session Security Best Practices

## MODULE 14

# MySQL and PHP Database Integration

- Introduction to Databases and MySQL
- Connecting PHP with MySQL (mysqli and PDO)
- Performing CRUD Operations (Create, Read, Update, Delete)
- Using Prepared Statements for Secure Queries
- Handling SQL Errors in PHP

## MODULE 15

# Advanced MySQL with PHP

- Using Joins and Complex Queries in PHP
- Transactions and Rollbacks
- Using `mysqli_multi_query()` for Multiple Queries
- Pagination and Sorting Results in PHP
- Managing Large Datasets Efficiently

## MODULE 16

# PHP and MVC Architecture

- Introduction to MVC (Model-View-Controller) Architecture
- Creating a Simple MVC Application in PHP
- Separating Business Logic, Views, and Data
- Using Routing in PHP MVC Frameworks
- Advantages of Using MVC in PHP

## MODULE 17

# PHP Security Best Practices

- Securing PHP Applications against SQL Injection
- Preventing XSS (Cross-Site Scripting) Attacks
- Using CSRF Tokens to Prevent CSRF Attacks
- Secure Password Storage with `password_hash()` and `password_verify()`
- Protecting Session Data and Managing Session Hijacking

## MODULE 18

# Working with APIs in PHP

- Introduction to RESTful APIs and Web Services
- Sending API Requests with cURL in PHP
- Consuming JSON and XML APIs in PHP
- Handling Authentication (Basic Auth, OAuth)

Creating a Simple API with PHP

## MODULE 19

# PHP and Web Services

- Introduction to SOAP and REST APIs
- Creating a SOAP Web Service in PHP
- Working with REST APIs in PHP (GET, POST, PUT, DELETE)
- Using `file_get_contents()` and `curl` for API Integration
- Best Practices for Consuming Web Services

## MODULE 20

# PHP and AJAX

- Introduction to AJAX and Asynchronous Requests
- Sending AJAX Requests with PHP and JavaScript
- Handling JSON Data with AJAX and PHP
- Updating Web Pages Dynamically with jQuery and PHP
- Real-Time Data Updates with AJAX

## MODULE 21

# PHP Frameworks (Laravel, Symfony, CodeIgniter)

- Introduction to PHP Frameworks and Why Use Them
- Getting Started with Laravel Framework
- Exploring Key Features of Symfony
- Building Simple Applications with CodeIgniter
- MVC Framework Structure and Routing in PHP

## MODULE 22

# Caching and Performance Optimization in PHP

- Introduction to Caching in PHP
- Using File Caching, Database Caching, and Opcode Caching
- Memcached and Redis in PHP for Caching
- Optimizing Database Queries for Better Performance
- Profiling and Benchmarking PHP Applications

## MODULE 23

# PHP Unit Testing and Test-Driven Development

- Introduction to Unit Testing with PHP
- Setting Up PHPUnit for Testing PHP Code
- Writing Test Cases and Assertions in PHPUnit
- Mocking and Stubbing in Unit Tests
- Test-Driven Development (TDD) Practices

## MODULE 24

# PHP with Front-End Technologies (HTML, CSS, JavaScript)

- Integrating PHP with HTML Forms
- Passing Data from PHP to JavaScript
- Using PHP with AJAX and jQuery
- Dynamic Content Rendering with PHP, JavaScript, and AJAX
- Using PHP to Generate Dynamic HTML Content

## MODULE 25

# Deploying PHP Applications

- Preparing PHP Applications for Production
- Setting Up a PHP Application on Apache or Nginx Server
- Configuring PHP for Production Environment (Error Reporting, Caching)
- Using Version Control with Git and Deploying to Remote Servers
- Continuous Integration and Deployment for PHP Applications

# Thank You

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