ICSD
IIHT Certified Software Developer

IIHT
FUTURE-PROOF CAREERS

CAREER PROGRAMS
IN SOFTWARE

IIHT Certified Software Developer (ICSD) is unique in its training and deliver methodology as it offers a strong foundation on the programing techniques in the first semester, followed by advanced programing skills and industry ready technologies in the second semester.
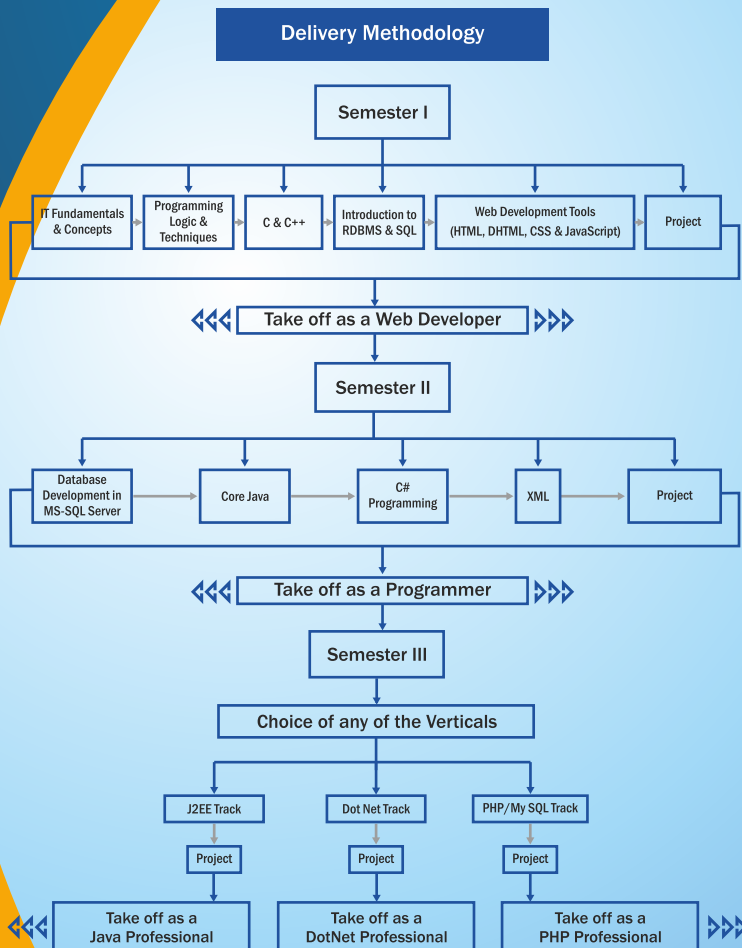
The third semester has got 3 options where in the candidate can choose any of the 3 verticals and can exit as a industry ready Java professional or a DotNet professional or a PHP/MYSQL professional.

The entire course has been designed with real world stimulated projects so that the candidate goes out industry ready with the course mapped to international certification.

ICSD - A perfect industry ready program for your IT career

Eligibility: 10+2 or equivalent, undergraduate and graduates.

Duration: One year

Delivery Methodology

Semester I

| IT Fundamentals & Concepts | Programming Logic & Techniques | C & C++ | Introduction to RDBMS & SQL | Web Development Tools (HTML, DHTML, CSS & JavaScript) | Project |

◀◀◀ **Take off as a Web Developer** ▶▶▶

Semester II

| Database Development in MS-SQL Server | Core Java | C# Programming | XML | Project |

◀◀◀ **Take off as a Programmer** ▶▶▶

Semester III

Choice of any of the Verticals

| J2EE Track | Dot Net Track | PHP/My SQL Track |
| Project | Project | Project |

◀◀◀ | Take off as a Java Professional | Take off as a DotNet Professional | Take off as a PHP Professional | ▶▶▶

Semester I

IT Fundamental and Concepts
- Components of a PC and their functions
- Number system and Operating System
- Network and Security

Programming Logic and Techniques
- Why programming languages?
- Software Engineering
- Overview of Programming Languages
- Programming Paradigms and Procedure oriented Programming
- Object oriented Programming
- Database Management Systems (DBMS)
- Data mining
- Data warehousing

Programming in C
- Control Structures
- Arrays, Functions
- Structures in C
- Pointers in C
- Macros and Storage Class
- Files Input/output
- Command line arguments and Data Structure

Programming in C++
- Introduction to OOP and C++
- Classes and Objects
- Constructors and Destructors
- Dynamic Memory Management
- Miscellaneous class issues
- Inheritance
- Dynamic Binding
- C++ I/O formatting and File Handling

Introduction to RDBMS
- Types of data models
- Entity - relationship model
- Normalization

Introduction to SQL
- SQL server tools
- Querying data from a single tables and multiple tables
- Managing databases and tables
- Manipulate data in tables
- Views and Indexes
- Store procedures and functions
- Triggers and transactions
- Managed code implementation

HTML
- HTML headings
- HTML Comment
- HTML Paragraphs
- HTML Line Breaks & Rules
- HTML Tags
- HTML Tables
- HTML Nesting
- HTML Forms

DHTML
- DHTML JavaScript
- DHTML HTML DOM
- DHTML Events
- DHTML Examples

CSS
- CSS Comments
- Multiple Style Sheets
- CSS properties used for background effects
- CSS Font Families, Links, Lists
- Table Borders and CSS Padding

JavaScript
- Statements and Variables
- Operators and Popup Boxes
- Conditional Statements
- Events and Functions
- JavaScript Exceptions

C
C++
JAVA
PHP/MYSQL
J2EE
.NET

Database Development in MS-SQL Server
- SQL Server 2005 / SQL Server 2008 Overview
- Transact SQL (TSQL) - the Basics
- Views, Triggers
- Stored Procedures
- TSQL Enhancements
- Monitoring your SQL Server
- Messaging with the SQL Server 2005 / SQL Server 2008 Service Broker
- Using SQL Server 2005 / SQL Server 2008 Integration
- XML-Based Solutions
- Web Services and HTTP Endpoints
- Programming with Notification Services
- SQL Server with .NET
- Building SQL 2005/2008 Client Applications
- SQL Management Objects
- SQL 2005/2008 Reporting Services

Core Java
- Fundamentals of Core Java Programming
- Introduction to java
- Methods in Java
- Arrays
- String & String Buffer
- Object-Oriented Programming
- Introduction OOPs
- Object and Classes
- Developing Comprehensive Projects:
- Packages
- Exception Handling

Programming Using C#
- Evolution and Overview of .Net Framework
- Classes and Objects
- Inheritance & Interfaces
- Generics & Collections
- XML and .Net Framework
- Delegates and Events
- Multithreading
- Reflection & Serialization
- Garbage collection and Memory Management
- ADO.Net
- WebServices
-

eXtensible Markup Language (XML)
- DTD
- Syntax
- Elements
- Attributes
- Schema
- SAX
- DOM
- JAXP
- Xpath
- Xquery
- XSLT

Project

Semester III - Java Professional Track
- Advanced Java
- Multithreading
- Collections
- Networking
- Database Connectivity: JDBC
- Remote Objects
- Advanced Swings
- Advanced AWT
- JavaBeans
- Security

J2EE Architecture
- Introduction to J2EE Architecture
- API in J2EE
- List of API IN J2EE:
- SERVLET, JSP, JNDI, JSTL, JDBC, JMS,JCA, JSF, EJB3
- JMX, RMI-IIOP, JAVA-IDL, JAX-RPC, JAXP, STAX, JAAS
- Servlets and Java Server Pages EJB3
- Session beans:
- Stateless session bean
- Entiry bean
- JAVA MESSAGE SERVICE API
- JAVA SERVER FACES

Project

Semester III - Dot Net Professional Track
- DOT NET
- Developing Web Applications using ASP.NET
- Custom Control Building in ASP.NET
- Globalization
- Web services
- ASP.NET Configuration Settings
- Active X Data Object.NET
- XML
- Transactions

- Data Binding
- Windows Forms Application
- Grids
- Multithreaded User Interfaces
- Web Deployment
- Language Integrated Query (LINQ)
- LINQ to SQL
- LINQ to Entities
- Windows Presentation Foundation (WPF)
- Add graphics and multimedia support to a WPF application
- Configure and deploy WPF applications
- Windows Communication Foundation (WCF)
- Bindings in WCF
- Contracts in WCF
- Creating simple WCF application

Project

- **Semester III - PHP Professional Track**

PHP
- Overview of PHP
- Developing Dynamic Internet Applications
- Basic Scripting & Looping Constructs
- PHP Scripting Fundamentals
- PHP Operators
- Logical Operators
- Conditional Constructs
- Arrays in PHP
- Initializing Arrays
- Array Functions
- PHP Functions
- Recursion
- Dynamic Function Calls
- Predefined PHP Functions
- Mailing Functions
- Classes And Objects
- Objects
- Reflection
- File Handling
- Changing and Editing File Contents
- File Locking
- Working with Databases and Forms
- Configuring PHP For Database Support

- ODBC
- Using Cookies with PHP
- Miscellaneous PHP Tasks

MySQL
- Overview of MySQL
- History of MySQL
- Connecting to and Disconnecting from the Server
- Data Types Functions and Operators SQL Statement Syntax Data Definition Statements
- Data Manipulation Statements & Control Statements
- Stored Procedures & Functions
- Triggers
- Views
- Introduction to AJAX

Project

Make a smart choice, Choose IIHT, Join today!

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