

# Summer Training

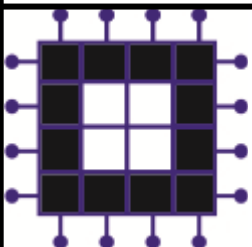
in

## Software Development

(Live Project)

***Technology Partners of Cadence Design Systems. Vanguard Partner of Mentor Graphics (Worldwide EDA Giants)***

***An Initiative by Industry Experts from Cadence, Atrenta & Patni with qualification from IITs and BITS-Pilani***



**DKOP Labs Pvt. Ltd.**

Knowledge, Operations and Practices

A-82, Ground Floor, Sector – 57, Noida – 201301

Tel: 0120-4274237, Mob: +91-9971792797, +91-9780280410, +91-9910101496,

Email: [info@dkoplabs.com](mailto:info@dkoplabs.com); Web: <http://www.dkoplabs.com>

# PROGRAMS

There are different programs available in Summer Training in software development. Students can choose the programs they are inclined to pursue.

S. No	Program Title	Fee* (Rs)
1.	Engineering Applications using C/C++	12000
2.	Core JAVA & Android App Development	12000
3.	Web Application using PHP & MySQL	12000

\* Service tax as applicable

**Batches Commence on:** May 15<sup>th</sup>, June 1<sup>st</sup>, 15<sup>th</sup> & July 1<sup>st</sup>

**Total Seats** : 30 per batch (max)

**Duration** : 4 hrs/day, 5 days/week for six weeks

**Project starts from second week along with the training!**

## PROGRAM DETAILS

### PROGRAM 1: ENGINEERING APPLICATIONS USING C/C++

#### MODULE 1: ALL ABOUT C LANGUAGE & DATA STRUCTURES

1. Introduction to C language
2. C language building blocks - data types, type conversions, operators
3. Control Flow - if, if-else, case, for, while, do-while, break-continue, labels, goto
4. Modular Programming - variables - external, global, local, static, registers, functions, macros, header files & C pre-processor directives
5. Advanced Data Types - strings, enums, structure, union, pointers, arrays, user defined types
6. I/O basics - file, standard I/O

#### MODULE 2: DATA STRUCTURE

1. Basics of Data Structures
2. Building basic data structures in C
  1. Arrays
  2. Stacks
  3. Queues
  4. Circular Queue
  5. Linked Lists

6. **Doubly Linked Lists**
7. **Circular Doubly Linked Lists**
8. **Trees**
9. **Weighted Trees**
10. **Balanced Trees**

## MODULE 3: DESIGN, ANALYSIS & OPTIMIZATION OF ALGORITHMS

---

1. **Design & Analysis of Efficient Algorithms**
2. **Methods commonly used in Practice**
3. **Searching Algorithms - linear, binary**
4. **Sorting algorithms - bubble sort, insertion sort, merge sort, quick sort, heap sort**
5. **Binary/Balanced Tree Traversal - in-order, pre-order, post-order, search**
6. **Divide & Conquer**

## PROGRAM 2: CORE JAVA & ANDROID APP DEVELOPMENT

---

### MODULE 1: JAVA

---

1. **Basics of Programming**
2. **Data Types in Java**
3. **Operators**
4. **Methods**
5. **Classes and Objects**
6. **Introduction to AWT**
7. **Swings Programming**
8. **Event Handling**
9. **Exception Handling**
10. **File Input/Output**

### MODULE 2: DATABASE & SQL

---

1. **Database Basics**
2. **Designing relational database**
3. **SQL - Structured Query Language**

### MODULE 3: INTRODUCTION TO ANDROID AND JAVA

---

1. **Installing Android**
2. **Creating Hello World**
3. **Running on Emulator**
4. **Introduction to Java Data types, Loops, Conditionals and Operators**

### MODULE 4: ANDROID PROGRAMMING

---

1. **Building Blocks of Android**
2. **Intent and Activity**
3. **Layouts In Android**
4. **Android Form Widgets**
5. **Image and media**
6. **Debugging Android Code**
7. **Basic Graphics**

8. Input Handling
9. Accessing Internal Files system
10. Accessing SD cards
11. Introduction to SQLite

## PROG 3: WEB APPLICATION DEVELOPMENT USING PHP & MYSQL

---

### MODULE 1: DATABASE & SQL

---

1. Database Basics
2. Designing relational database
3. SQL - Structured Query Language

### MODULE 2: PHP

---

1. Orientation and First Steps
2. Working with Text and Numbers
3. Making Decisions and Repeating Yourself
4. Working with Arrays
5. Functions
6. Making Web Forms
7. Storing Information with Databases
8. Remembering Users with Cookies and Sessions
9. Handling Dates and Times
10. Working with Files
11. Parsing and Generating XML
12. Debugging
13. What Else Can You Do with PHP?

### MODULE 3: HTML5, CSS3 & JAVASCRIPT

---

1. Fundamental Syntax and Semantics
2. Progressive Markup and Techniques
3. Forms
4. Javascript
5. CSS3

## BENEFITS FOR YOU

---

1. Helps you in understanding the **practical** and **industrial applications** of academic curriculum
2. Build your knowledge to develop **innovative projects** during your final year of engineering
3. Enhances the Skill-Set in your resume for **better placement prospects** within the **semiconductor industry**
4. Helps the aspirants of **higher studies abroad** to face the stiff competition from students of other countries
5. Build your confidence through **hands on exposure** to various **tools & technologies**

## **TEAM OF TRAINERS**

---

DKOP Labs is proud to have highly qualified and experienced professionals from Industry, Research and Academics. For details, [click here](#).

## **PLACEMENTS**

---

**We have been providing excellent placement platform to our trainees in companies like Cadence, Xilinx, ST Microelectronics, Samsung, Synopsys, Mentor Graphics, CMC Limited, SmartPlay, TrueChip, Agnisys, DKOP Labs, etc. For detailed list, [click here](#).**

## **DKOP PARTNERSHIPS**

---

TECHNOLOGY PARTNER OF CADENCE DESIGN SYSTEMS

---

QUESTA VANGUARD PARTNER OF MENTOR GRAPHICS

---

HEP PARTNER OF MENTOR GRAPHICS

---

## **ON-CAMPUS PROGRAMS**

---

We have conducted on-campus programs (Workshops/Trainings/Conferences) at following colleges:

1. NIT, Jalandhar
2. Galgotia College of Engineering & Technology, Greater Noida
3. Maharaja Surajmal Institute of Technology, Delhi
4. Sharda Group of Institutions, Agra
5. Sharda University, Greater Noida
6. Thapar University, Patiala
7. Banasthali University, Niwai, Rajasthan
8. Jamia University, Delhi
9. Ambedkar Institute of Technology, Delhi
10. Greater Noida Institute of Technology, Greater Noida
11. Lovely Professional University, Phagwara
12. Echelon Institute of Technology, Faridabad
13. SRM University, Chennai

14. St Margaret Engineering College, Neemrana
15. Maharaja Agarsen College, Delhi University
16. UIET, Kurukshetra University
17. RIMT, Mandi Gobindgarh, Punjab
18. Poornima College, Jaipur
19. Manipal University, Jaipur
20. ITM University, Gurgaon