# SKILL @ LYNC

## **PROGRAM OVERVIEW**



# PG Program in Full Stack Web Development

## ONLINE

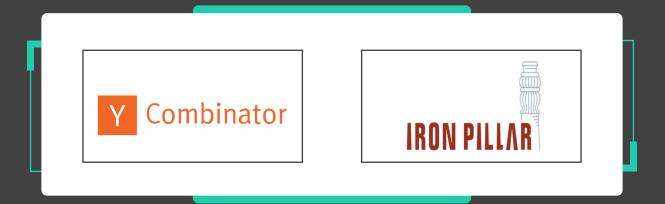


# WHO ARE WE?

Skill-Lync is among India's leading edtech platforms dedicated to transforming engineering education. We equip young engineers with the latest skill sets and cutting-edge tools in new-age technologies.

The brainchild of two engineers from Chennai, Skill-Lync is on a mission to bridge the skill gap between aspiring professionals and industry's demands through job-oriented courses.

# **POWERED BY**



# LEADING COMPANIES THAT HAVE HIRED OUR STUDENTS







## WHY LEARN WITH SKILL-LYNC?



#### JOB ASSISTANCE

for up to 10 interview opportunities; with technical assessments, mock interviews and resume preparation

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#### INDUSTRY-RELEVANT CURRICULUM

drafted by subject-matter experts in the latest hardware and software tools

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#### CO-CERTIFIED BY N.S.D.C AND SKILL-LYNC

your coursework



#### UNPAID INTERNSHIP

Internship opportunities (unpaid) for eligible students to build a strong portfolio



#### FORUM SUPPORT

for interaction with mentors & peers to get your doubts cleared



#### LIFETIME VIDEO ACCESS

for all lectures from Learning Management System (LMS)



#### PROJECTS FOR YOUR PORTFOLIO

**EXPERT MENTORSHIP** 

by domain specialists who will personally guide you with

that are implementations of real large-scale projects

Know more about Skill-Lync



## **ABOUT THE PROGRAM**







This comprehensive program comprising **six courses** helps you understand the technologies behind scalable web applications. On completion of the program, you will be fully equipped to develop, deploy and maintain an enterprise application.

# **SYLLABUS**

The syllabus comprises two specialisations – **Frontend Track** and **Backend Track**, with a total of **six courses** across the two tracks.

### 1. The Complete Front-End Development - 2.0

- HTML5
- CSS
- Bootstrap
- Page Events
- JavaScript
- AJAX, JSON and XML

## 2. Angular Web Development for the Real World

- Course Overview, Prerequisites, & Introduction to Frontend Web Development
- Introduction to Angular Framework and Architecture
- Understanding Modules and Components
- Understanding Templates and Advanced Components Concepts
- Introduction to Services/Dependency Injection Concepts along with RXJS (Reactive Programming)
- Intercomponent Communication and External HTTP API Communication using Angular
- Understanding Directives and Styling Angular Application with Angular Material
- Understanding Pipes and Introduction to Forms
- Template Forms
- Reactive Forms
- Introduction to Angular Routing
- Unit Testing Angular Application and Debugging Code
- Useful Tips and Tricks for Building Real-World Angular Application

## 3. Data Structures and Algorithms using JAVA

- Introduction
- Arrays, Strings, and Lists
- Stacks and Queues
- Trees
- Heaps and Tries
- Graphs & Algorithms
- Sorting
- Searching and Hashing
- Greedy Algorithms
- Divide and Conquer
- Backtracking
- Dynamic Programming

## 4. Introduction to Java Programming 2.0

- Basic Constructs of Java Programming Language
- Object Oriented Programming
- Advanced Topics in Java

## 5. Everything about Database 2.0

- Introduction to Databases
- Creating Database Tables
- Introduction to RDBMS
- Database Design
- SQL
- NoSQL
- MongoBD Basics
- Redis
- PL/SQL
- More about Databases

### 6. Microservices using Java, Spring & Docker

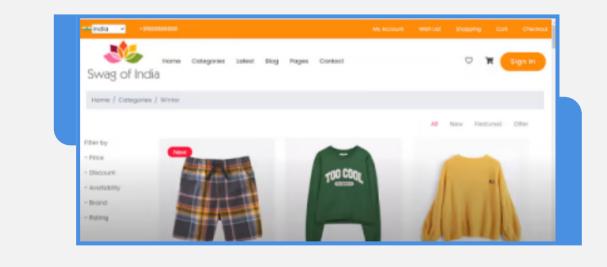
- Introduction to Microservices Architecture
- Microservices and Cloud
- Creating a Bank Application using Microservices
- Using Docker for Microservices
- Managing Configurations using Spring Cloud
- Discovering and Registering to a Service
- Building Resiliency in Microservices
- Cross-Cutting Concerns and Routing in Microservices
- Challenges with Distributed Logging Aggregation with Monitoring the Health
- Using Kubernetes for Scaling, Deployment and Self-Recovery
- Using Helm for Easier Installation and Packaging of YAML Files
- Spring MVC using Spring Boot



### **TOP INDUSTRY-RELEVANT PROJECTS**

The syllabus is supplemented with **10 industry-relevant projects**, a few of which are listed below:

• Designing a professional-quality web portfolio



• Design and implement software



• Using microservice to get insurance policy from the banking app



• Enhancing an e-commerce app using Angular



• Designing an e-commerce database



Click for more details about the program





#### Tools you will learn:

Java, HTML5, CSS, Bootstrap, JavaScript, jQuery, AJAX, JSON, Eclipse IDE, Spring Tools 4, Docker, MySQL, MongoDB

## JOB OPPORTUNITIES FOR YOU

Our program prepares you for top job roles like

