

# Launch your career here



## Who We Are

We provide technical and soft skills training through an immersive bootcamp to help university graduates meet the needs of the IT industry, globally. **Two-third** of the training program is focused on upskilling of capabilities in technical areas in demand by the industry, while **one-third** of the program is focused on soft-skills development that addresses communications, emotional intelligence, personal leadership, teamwork and ethics.

**We take trainees on a journey to discover who they already are; building confidence of this talent, polishing it to address industry needs with the knowledge and tools they acquire.**

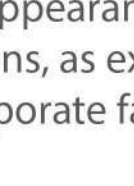
## Our Vision

To become the provider of choice of trained professionals for the IT industry in Pakistan. Knowledge Streams aims to bridge the talent – employment gap in the IT sector at scale, with speed, and quality, exceeding international standards.

## Who Can Join

All CS/IT Graduates are eligible to apply. Graduates from associated fields such as engineering, statistics, economics etc. having a basic background in computer sciences and knowledge of 1) a programming language, 2) data structures and 3) software engineering, can also apply

## The Boot-Camp

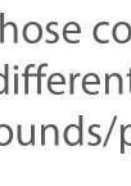


### IMMERSIVE LEARNING BY DOING

Technical sessions with **Hands-on** training in workspaces having computer workstation clusters to facilitate group learning.

Trainees expected to follow norms of appearance, manners, interactions, as expected in a corporate facility.

Final capstone project, chosen in consultation with industry

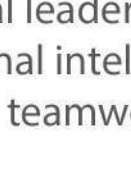


### INDUSTRY DRIVEN CURRICULUM

**12 weeks immersive face-to-face programs:** 30 hours a week. Morning and evening sessions

**Module-1 (Software Engineering Fundamentals):** Builds a common baseline among those coming from different IT backgrounds/programs.

**Modules-2 (Technical Stream):** Builds technical skills in a specific area, such as MERN, .NET, Python/DJANGO, etc.

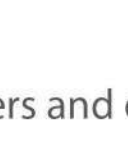


### SOFT-SKILLS LEARNING

Through experiential learning, participants realize their potential and develop their competence to take on professional responsibilities.

Focus on communication, personal leadership, ethics, emotional intelligence and teamwork.

## Added Benefits

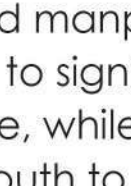
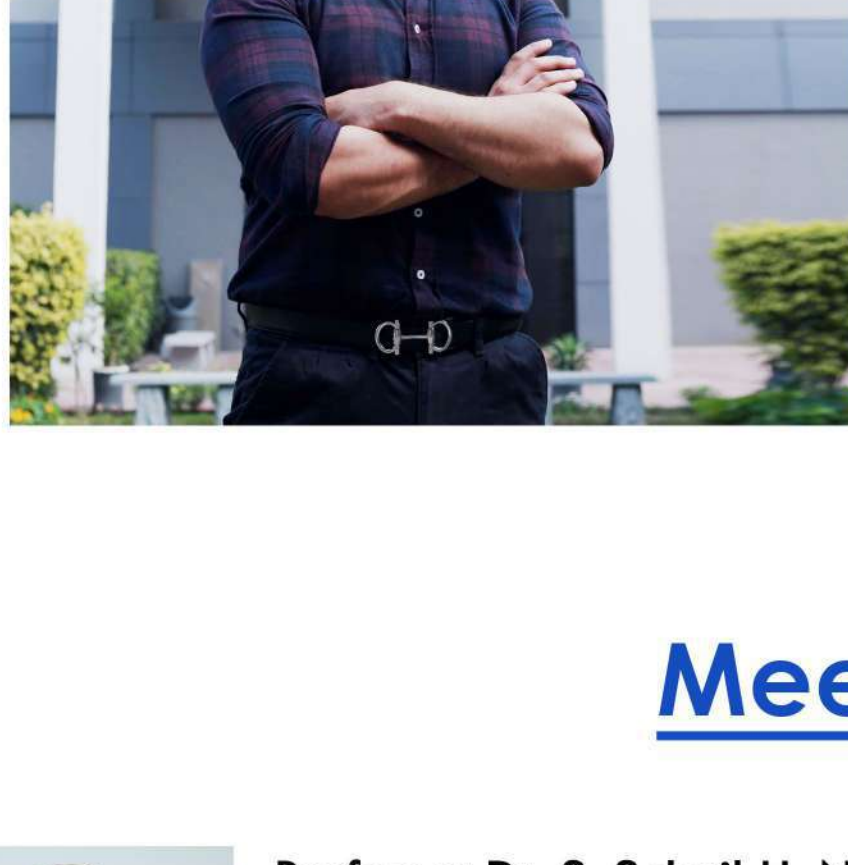


### NETWORKING AND MENTORING:

Trainees have the opportunity to connect directly with Industry leaders and employers at networking events held at Knowledge Streams campus.

### JOB PREPARATION:

Trainees are guided on building their brand through resume and LinkedIn profiles while preparing them for technical and culture fit interviews



## Outcomes

High quality, trained manpower for the IT industry allowing the sector to significantly expand its local and global presence, while providing opportunities for the talented youth to develop and prosper.

## Meet Team



### Professor Dr. S. Sohail H. Naqvi Founder & CEO

Dr. Naqvi recently completed his term of founding Rector of the University of CentralAsia, that he had joined in August 2018 upon completion of five-years as VC of LUMS where he had spearheaded the transition of this prestigious, primarily undergraduate, institution into the top ranked research universities of the country. Prior to LUMS he was the Executive Director of the HEC for eight years, where he oversaw implementation of an ambitious portfolio of programs. In 2016 he was awarded the Sitar-e-Imtiaz by the Govt of Pakistan for his services to higher education & in 2022 he was awarded the "Best of Education" award by the Ministry of Education & Science of the Kyrgyz Republic. In 2022 he was also given the Lifetime achievement award by the Pakistan Engineering Council.



### Professor Dr. Naveed A. Malik Senior Advisor

Dr. Naveed Malik is Senior Advisor at Knowledge Streams, having joined it on the day that it was established. Prior to that he was the founding Rector of the Virtual University of Pakistan where he served from 2001-2019. Dr. Malik obtained his Doctor of Science degree from M.I.T. in the field of Electrical Engineering & Computer Science specializing in Digital Signal Processing. He is a life member of the Pakistan Institute of Physics and in 2008 was conferred the Pakistan Civil Award of Sitar-e-Imtiaz for services to education. He was awarded the title of Honorary Fellow by the Commonwealth of Learning in 2016.



### Komal Masood AVP Learning & Development

Komal is an experienced professional with expertise in managing large-scale & complex projects in legal, financial, & education domains. Beginning her career in 2007 at Techlogix, Komal refined her expertise in Training and Skills development before transitioning to business analysis and project management. Her critical thinking skills & commitment to precision & excellence have been essential in solving complex problems and delivering successful projects. Komal's passion for growth and development is reflected in her implementation of training programs, where she aims to foster individual and organizational growth.

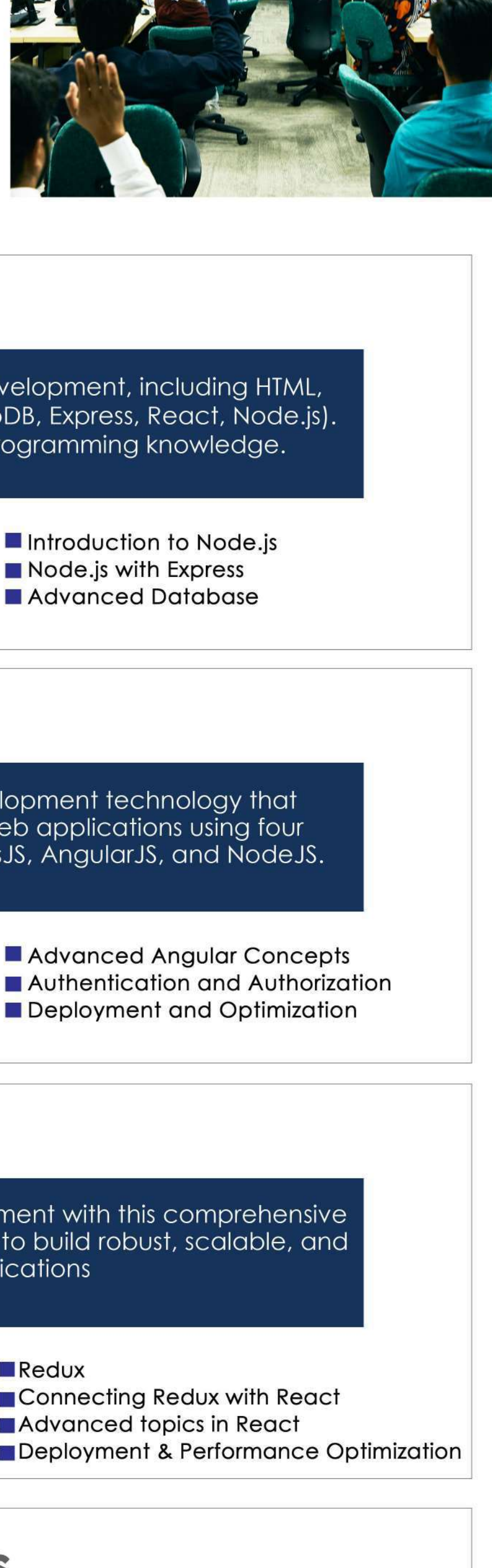


### Dr. M. Fareed Zaffar Advisor

Dr. Fareed is Advisor at Knowledge Streams during his sabbatical from LUMS, where he is an Associate Professor of Computer Science. He received his Ph.D. in Computer Science from Duke University in 2005 and the BSc. (Hons) degree from LUMS with a major in Computer Science and minor in Mathematics in 1999. His primary research interests are in the areas of security, privacy and Internet measurement. His recent work focuses on social networks, online fraud & cybercrime and his previous work looked at enabling public sector reform through technology and the use of information and communication technologies for development.

## Courses Offered

- ▶ MERN
- ▶ MEAN
- ▶ React
- ▶ Node.js
- ▶ Angular
- ▶ Python & Django
- ▶ .NET
- ▶ Java Spring
- ▶ PHP
- ▶ Data Sciences: Machine Learning
- ▶ Artificial Intelligence: Machine Learning
- ▶ Cyber Security



## MERN

This course teaches the basics of web development, including HTML, CSS, JavaScript, & the MERN stack (MongoDB, Express, React, Node.js). It is suitable for beginners with some programming knowledge.

- HTML, CSS, & JavaScript Basics
- Introduction to React
- React Components & Lifecycle Methods
- React Router and Redux
- Introduction to Node.js
- Node.js with Express
- Advanced Database

## MEAN

MEAN stack is a leading full-stack development technology that empowers developers to build robust web applications using four powerful technologies: MongoDB, ExpressJS, AngularJS, and NodeJS.

- Introduction to MEAN stack
- MongoDB and RESTful APIs
- Express Framework
- Angular Framework
- Advanced Angular Concepts
- Authentication and Authorization
- Deployment and Optimization

## React

Learn the fundamentals of React development with this comprehensive course. By course end, you'll have the skills to build robust, scalable, and interactive web applications

- Introduction to React
- React Props and State
- Forms and Hooks
- React Router
- Redux
- Connecting Redux with React
- Advanced Topics in React
- Deployment & Performance Optimization

## Node.js

This course offers a comprehensive understanding of server-side JavaScript development. It covers core concepts such as building web applications with Node.js and Express, working with databases, and creating RESTful APIs.

- Introduction to Node.js & JavaScript runtime environment
- Node.js Modules & Asynchronous Programming
- Building Web Applications with Express
- Working with Databases in Node.js
- Authentication & Authorization in Node.js
- Real-time Communication with Socket.io
- Java Spring
- Deployment and Performance
- Optimization in Node.js

## Angular

This course provides a comprehensive curriculum on the popular web application framework developed by Google.

- Introduction to Angular
- Angular Components & Services
- Error handling & Routing
- Forms
- Material UI
- Optimization & Deployment

## Python & Django

This course imparts expertise in creating dynamic web applications using Python programming language and Django web framework.

- Python Overview
- Introduction to Django
- Django Models
- Django Forms and Views
- Django Templates
- Django Authentication
- Django REST Framework
- Django Deployment

## .NET

This course is developed to teach the fundamentals of building web and desktop applications using C#, ASP.NET, and Visual Studio.

- Introduction to .NET Core And C#
- Object-Oriented Programming in .NET
- ASP.NET MVC + JQuery
- HTTP Requests and AJAX
- SQL & Entity Framework
- Dependency Injection, Logging & Exception Handling

## Java Spring

This course will equip with expertise in developing robust and scalable enterprise-level applications using the highly popular Spring framework.

- Java Basics
- Arrays & OOP
- File Handling & Data Structures
- Java Spring
- MVC
- Database Connection
- Authentication

## PHP

This course covers fundamentals like variables, data types, and control structures, as well as creating dynamic web apps with HTML forms, cookies, and sessions.

- PHP Basics
- Arrays, Functions, Strings
- Object-Oriented Programming & Web Fundamentals
- Databases & SQL
- PHP Frameworks
- Advanced Web Development Concepts
- Authentication & User Management

## Data Science:Machine Learning

This course provides a comprehensive introduction to the field, covering statistical concepts, programming languages, data analysis, data visualization, predictive modeling, and deep learning.

- Introduction to Data Science
- Data Visualization with Tableau
- Statistical Analysis
- Machine Learning Basics
- Data Wrangling with Python
- Advanced Data Visualization with Tableau
- Advanced Machine Learning Techniques

## Artificial Intelligence:Machine Learning

This course provides a comprehensive introduction to artificial intelligence and machine learning, covering their history, features, and applications.

- Introduction & Setup
- Concepts & Basic Models
- Supervised Learning
- Unsupervised Learning
- Neural Networks & CNNs
- RNNs

## Cyber Security

This introductory-level course provides foundational knowledge and skills in cybersecurity and web application security.

- Introduction to Cybersecurity
- Web Application Security
- Networking Fundamentals for Web Applications
- Web Application Architecture
- Web Application Scanning & Enumeration
- Web Application Vulnerability Assessment
- Web Application Penetration Testing
- Fixing Web Application Vulnerabilities

## Our Cost Structure

The training fee for the bootcamp is Rs. 90,000, payable in two installments.

## Bootcamp Launch Date

Knowledge Streams full program launches on **June 5, 2023**



What Course will your life take ?