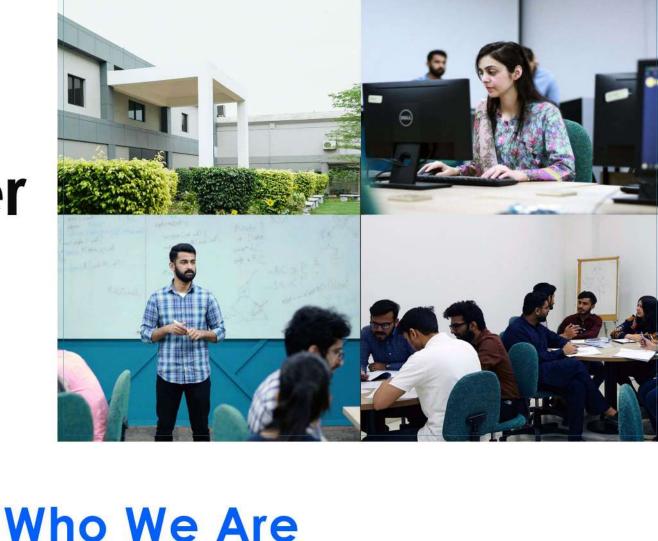
## Launch your career here at





### 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

We provide technical and soft skills training through an immersive bootcamp to help

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

INDUSTRY DRIVEN

**CURRICULUM** 

12 weeks immersive

### Through experiential learning, face-to-face programs: 30 participants realize their potential hours a week. Morning and and develop their competence to evening sessions take on professional



IMMERSIVE LEARNING

BY DOING

norms of appearance, manners, interactions, as expected in a corporate facility. Final capstone project, chosen in consultation with industry

Trainees expected to follow

**NETWORKING AND MENTORING:** 

held at Knowledge Streams campus. JOB PREPARATION:

technical and culture fit interviews



### among those coming from different IT backgrounds/programs.

Builds a common baseline

Modules-2 (Technical Stream): Builds technical skills in a specific area, such as MERN,

**Added Benifits** 

.NET, Python/DJANGO, etc.

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



teamwork

**SOFT-SKILLS LEARNING** 

Trainees have the opportunity to connect directly with Industry leaders and employers at networking events

**Outcomes** High quality, trained manpower for the IT industry allowing the sector to significantly expand its local



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

and global presence, while providing opportunities

for the talented youth to develop and prosper.

MERN

MEAN

React

Node.js

Angular

▶ .NET

PHP

Cyber Security

Data Sciences: Machine Learning

Artifical Intelligence: Machine Learning

HTML, CSS, & JavaScript Basics

React Components & Lifecycle Methods

Introduction to React

React Router and Redux

Introduction to MEAN stack

MongoDB and RESTful APIs

Express Framework

Angular Framework

React Props and State

Forms and Hooks

■ Node.js Modules &

Introduction to Angular

Error handling & Services

Angular Components

Python Overview

Django Models

Introduction to Django

Django Forms and Views

■ ASP.NET MVC + JQuery HTTP Requests and AJAX

Java Basics

■ OOP Basics

Concurrency

Java Basics Arrays & OOP

Java Spring

PHP Basics

Arrays, Functions, Strings

React Router

and organizational growth.

Engineering Council.

Komal Masood

Python & Django Java Core ▶ Java Spring

Introduction to Node.js

Node.js with Express

Advanced Database

Advanced Angular Concepts

Deployment and Optimization

■Connecting Redux with React

■ Deployment & Performance Optimization

Authentication & Authorization in Node.js

■ Real-time Communication with Socket.io

Deployment and Performance

Optimization & Deployment

Java Spring

Forms

Material UI

Django Templates

Django Authentication Django REST Framework

■ SQL & Entity Framework

& Exception Handling

Database Connection

Databases & SQL PHP Frameworks

JVM tuning, garbage collection algorithms

Dependency Injection, Logging

Django Deployment

Advanced topics in React

Authentication and Authorization

## 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.

**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.

**MERN** 

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 Redux

React

- creating RESTful APIs. Introduction to Node.js & JavaScript runtime environment
- Routing Python & Django
- Introduction to .NET Core And C# Object-Oriented Programming in .NET

■ File Handling & Data Structures

■ File Handling & Data Structures

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

Object-Oriented Programming Advanced Web Development Concepts & Web Fundamentals 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.

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

RNNs

Unsupervised Learning

Neural Networks & CNNs

■Web Application Scanning & Enumeration

# Artificial Intelligence:Machine Learning

- in cybersecurity and web application security.

## Asynchronous Programming

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

Java is a widely-used programming language for developing various applications, from basic desktop programs to intricate enterprise-level systems.

- MVC Database Connection Authentication
- Introduction to Data Science Data Visualization with Tableau Statistical Analysis Machine Learning Basics

■ Introduction to Cybersecurity

Introduction & Setup

Supervised Learning

■ Concepts & Basic Models

- Web Application Security ■ Web Application Vulnerability Assessment ■Web Application Penetration Testing Networking Fundamentals for Fixing Web Application Vulnerabilities Web Applications Web Application Architecture

**Meet Our Team** Professor Dr. Naveed A. Malik Senior Advisor transition of this prestigious, primarily undergraduate, institution into the top ranked research universities of the country. Electrical Engineering & Computer Science Prior to LUMS he was the Executive Director specializing in Digital Signal Processing. of the HEC for eight years, where he He is a life member of the Pakistan Institute oversaw implementation of an ambitious of Physics and in 2008 was conferred the Pakistan Civil Award of Sitara-e-Imtiaz for portfolio of programs. In 2016 he was awarded the Sitar-e-Imtiaz by the Govt of services to education. He was awarded the Pakistan for his services to higher education title of Honorary Fellow by the & in 2022 he was awarded the "Best of Commonwealth of Learning in 2016. 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 Dr. M. Fareed Zaffar **AVP Learning & Development** Advisor Komal is an experienced professional with Dr. Fareed is Advisor at Knowledge Streams during his sabbatical from LUMS, expertise in managing large-scale & complex projects in legal, financial, & education where he is an Associate Professor of domains. Beginning her career in 2007 at Computer Science. He received his Ph.D. Techlogix, Komal refined her expertise in in Computer Science from Duke University Training and Skills development before in 2005 and the BSc. (Hons) degree from transitioning to business analysis and project LUMS with a major in Computer Science management. Her critical thinking skills & and minor in Mathematics in 1999. His commitment to precision & excellence have primary research interests are in the areas been essential in solving complex problems of security, privacy and Internet and delivering successful projects. Komal's measurement. His recent work focuses on passion for growth and development is social networks, online fraud & cybercrime reflected in her implementation of training and his previous work looked at enabling public sector reform through technology programs, where she aims to foster individual and the use of information and communication technologies for development. **Courses Offered** 



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

Building Web Applications with Express Optimization in Node.js Working with Databases in Node.js **Angular** 

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

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

Java Spring

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

GUI

Java Spring

- Data Wrangling with Python Advanced Data Visualization with Tableau Advanced Machine Learning Techniques
- Cyber Security This introductory-level course provides foundational knowledge and skills
- KNOWLEDGE STREAMS

What Course will your life take?