# ELK Master Class
# Elasticsearch, Beats, Logstash and Kibana

**Duration:** 4 Days

**Prerequisites for this course:** Basic Linux Knowledge

**Hands-On Format:** This hands-on class is approximately 80/20 lab to lecture ratio, combining engaging lecture, demos, group activities and discussions with comprehensive machine-based practical programming labs and project work.

**Module 1 – ELK Stack**
Course Overview
Introduction to Stack
Stack Components
Stack Architecture
Use Cases
Advantages and Disadvantages

**Module 2 – Installation and Configuraion**

Pre-requisites
Elasticsearch Installation
Kibana Installation
Logstash Installation
Beats Installation
Verify Installation

**Module 3 – Elasticsearch**

Introduction to Elastic Search
Elasticsearch Fundamentals
Elasticsearch Architecture
Elasticsearch REST APIs
Types of APIs
Document APIs
Index APIs
Search APIs
Cluster APIs
Aggregation APIs
Query DSL
Elasticsearch Queries
Managing and Monitoring Elasticsearch Cluster

**Module 4 – Kibana**

Introduction to Kibana
Kibana Fundamentals
Kibana Search
Kibana Visualizations
Kibana Dashboards
Kibana Management
Alerting Using Watcher

**Module 5 – Logstash**

Introduction to Logstash
Logstash Plugins
Input Plugins
Output Plugins
Filter Plugins
Setup Logstash Pipeline for Ingestion of Data into Elasticsearch
Queue Management at Logstash

**Module 6 – Beats**

Introduction to Beats
Beats Use-cases
Filebeat
Setup Filebeat for Shipping Logs from Client to Elastic Cluster