

Day - 1

- **Installation and Configuration**

- Deploy and start an Elasticsearch cluster that satisfies a given set of requirements
- Configure the nodes of a cluster to satisfy a given set of requirements
- Secure a cluster using Elasticsearch Security
- Define role-based access control using Elasticsearch Security

- **Indexing Data**

- Define an index that satisfies a given set of requirements
- Perform index, create, read, update, and delete operations on the documents of an index
- Define and use index aliases
- Define and use an index template for a given pattern that satisfies a given set of requirements
- Define and use a dynamic template that satisfies a given set of requirements
- Use the Reindex API and Update by Query API to reindex and/or update documents
- Define and use an ingest pipeline that satisfies a given set of requirements, including the use of Painless to modify documents

- **Queries**

- Write and execute a search query for terms and/or phrases in one or more fields of an index
- Write and execute a search query that is a Boolean combination of multiple queries and filters
- Highlight the search terms in the response of a query
- Sort the results of a query by a given set of requirements
- Implement pagination of the results of a search query
- Apply fuzzy matching to a query
- Define and use a search template
- Write and execute a query that searches across multiple clusters

- **Aggregations**

- **Mappings and Text Analysis**

- Define a mapping that satisfies a given set of requirements
- Define and use a custom analyzer that satisfies a given set of requirements
- Define and use multi-fields with different data types and/or analyzers
- Configure an index so that it properly maintains the relationships of nested arrays of objects

- **Cluster Administration**

- Allocate the shards of an index to specific nodes based on a given set of requirements
- Configure shard allocation awareness and forced awareness for an index
- Diagnose shard issues and repair a cluster's health
- Backup and restore a cluster and/or specific indices
- Configure a cluster for use with a hot/warm architecture
- Configure a cluster for cross cluster search