Datastat Research
Building Capacity in Training and Research

DATASTAT TRAINING IN

OFFICIAL COURSE PROSPECTUS

Center for Advanced Research & Professional Development

Nairobi Training Center • Global Virtual Academy • Corporate On-Site

DATA SCIENCE

Advanced Big Data Analytics and Processing Training Course

Comprehensive Course Syllabus, Practical Modules & Upcoming Schedules

PROGRAM SPECIFICATIONS & HIGHLIGHTS

DURATION
10 Days Practical Hands-on

DELIVERY MODES
In-Person Class & Live Virtual

CERTIFICATION
Accredited Certificate of Completion

INTAKES / DATES
Multiple Cohort Schedules Included

PREPARED FOR:

Valued Participant

Email: training@datastatresearch.org | Issued: November 24, 2026

Academic & Professional Training Year: 2026

DATASTAT TRAINING INSTITUTE
P.O. Box 102802-00101, Nairobi, Kenya
Training Centers: Nairobi • Mombasa • Kigali • Dubai • Live Virtual Academy
Tel: +254 724 527 104 | +254 734 969 612
Email: training@datastatresearch.org
www.datastatresearch.org

Advanced Big Data Analytics and Processing Training Course

Data Science • 10 Days Intensive • Accredited Certification

Course Overview

The Advanced Big Data Analytics and Processing Training Course is a comprehensive, practical, and industry-focused program designed to develop advanced competencies in big data analytics, data engineering, distributed computing, machine learning, real-time data processing, cloud analytics, and business intelligence

Key Skills & Software Tools Covered

Apache Hadoop • Apache Spark • Python • Jupyter Notebook • Microsoft Power BI

Upcoming Training Schedules

Confirmed cohort intakes and venues. Both physical in-person classroom and live virtual online seats are available.

TRAINING DATES	LOCATION / VENUE	FORMAT / DURATION	INVESTMENT (FEE)
30 Nov 2026 – 11 Dec 2026	Nairobi	Classroom / 10d	**$3,000 USD**
30 Nov 2026 – 11 Dec 2026	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
30 Nov 2026 – 11 Dec 2026	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
30 Nov 2026 – 11 Dec 2026	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
30 Nov 2026 – 11 Dec 2026	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
30 Nov 2026 – 11 Dec 2026	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
30 Nov 2026 – 11 Dec 2026	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
30 Nov 2026 – 11 Dec 2026	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
30 Nov 2026 – 11 Dec 2026	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
14 Dec 2026 – 25 Dec 2026	Nairobi	Classroom / 10d	**$3,000 USD**
14 Dec 2026 – 25 Dec 2026	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
14 Dec 2026 – 25 Dec 2026	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
14 Dec 2026 – 25 Dec 2026	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
14 Dec 2026 – 25 Dec 2026	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
14 Dec 2026 – 25 Dec 2026	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
14 Dec 2026 – 25 Dec 2026	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
14 Dec 2026 – 25 Dec 2026	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
14 Dec 2026 – 25 Dec 2026	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
28 Dec 2026 – 8 Jan 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
28 Dec 2026 – 8 Jan 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
28 Dec 2026 – 8 Jan 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
28 Dec 2026 – 8 Jan 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**

28 Dec 2026 – 8 Jan 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
28 Dec 2026 – 8 Jan 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
28 Dec 2026 – 8 Jan 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
28 Dec 2026 – 8 Jan 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
28 Dec 2026 – 8 Jan 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
11 Jan 2027 – 22 Jan 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
11 Jan 2027 – 22 Jan 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
11 Jan 2027 – 22 Jan 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
11 Jan 2027 – 22 Jan 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
11 Jan 2027 – 22 Jan 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
11 Jan 2027 – 22 Jan 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
11 Jan 2027 – 22 Jan 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
11 Jan 2027 – 22 Jan 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
11 Jan 2027 – 22 Jan 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
25 Jan 2027 – 5 Feb 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
25 Jan 2027 – 5 Feb 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
25 Jan 2027 – 5 Feb 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
25 Jan 2027 – 5 Feb 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
25 Jan 2027 – 5 Feb 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
25 Jan 2027 – 5 Feb 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
25 Jan 2027 – 5 Feb 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
25 Jan 2027 – 5 Feb 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
25 Jan 2027 – 5 Feb 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
8 Feb 2027 – 19 Feb 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
8 Feb 2027 – 19 Feb 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
8 Feb 2027 – 19 Feb 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
8 Feb 2027 – 19 Feb 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
8 Feb 2027 – 19 Feb 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
8 Feb 2027 – 19 Feb 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
8 Feb 2027 – 19 Feb 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
8 Feb 2027 – 19 Feb 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
8 Feb 2027 – 19 Feb 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**

22 Feb 2027 – 5 Mar 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
22 Feb 2027 – 5 Mar 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
22 Feb 2027 – 5 Mar 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
22 Feb 2027 – 5 Mar 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
22 Feb 2027 – 5 Mar 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
22 Feb 2027 – 5 Mar 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
22 Feb 2027 – 5 Mar 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
22 Feb 2027 – 5 Mar 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
22 Feb 2027 – 5 Mar 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
8 Mar 2027 – 19 Mar 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
8 Mar 2027 – 19 Mar 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
8 Mar 2027 – 19 Mar 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
8 Mar 2027 – 19 Mar 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
8 Mar 2027 – 19 Mar 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
8 Mar 2027 – 19 Mar 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
8 Mar 2027 – 19 Mar 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
8 Mar 2027 – 19 Mar 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
8 Mar 2027 – 19 Mar 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
22 Mar 2027 – 2 Apr 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
22 Mar 2027 – 2 Apr 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
22 Mar 2027 – 2 Apr 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
22 Mar 2027 – 2 Apr 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
22 Mar 2027 – 2 Apr 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
22 Mar 2027 – 2 Apr 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
22 Mar 2027 – 2 Apr 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
22 Mar 2027 – 2 Apr 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
22 Mar 2027 – 2 Apr 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
5 Apr 2027 – 16 Apr 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
5 Apr 2027 – 16 Apr 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
5 Apr 2027 – 16 Apr 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
5 Apr 2027 – 16 Apr 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
5 Apr 2027 – 16 Apr 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**

5 Apr 2027 – 16 Apr 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
5 Apr 2027 – 16 Apr 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
5 Apr 2027 – 16 Apr 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
5 Apr 2027 – 16 Apr 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
19 Apr 2027 – 30 Apr 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
19 Apr 2027 – 30 Apr 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
19 Apr 2027 – 30 Apr 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
19 Apr 2027 – 30 Apr 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
19 Apr 2027 – 30 Apr 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
19 Apr 2027 – 30 Apr 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
19 Apr 2027 – 30 Apr 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
19 Apr 2027 – 30 Apr 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
19 Apr 2027 – 30 Apr 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
3 May 2027 – 14 May 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
3 May 2027 – 14 May 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
3 May 2027 – 14 May 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
3 May 2027 – 14 May 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
3 May 2027 – 14 May 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
3 May 2027 – 14 May 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
3 May 2027 – 14 May 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
3 May 2027 – 14 May 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
3 May 2027 – 14 May 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
17 May 2027 – 28 May 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
17 May 2027 – 28 May 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
17 May 2027 – 28 May 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
17 May 2027 – 28 May 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
17 May 2027 – 28 May 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
17 May 2027 – 28 May 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
17 May 2027 – 28 May 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
17 May 2027 – 28 May 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
17 May 2027 – 28 May 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
31 May 2027 – 11 Jun 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**

31 May 2027 – 11 Jun 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
31 May 2027 – 11 Jun 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
31 May 2027 – 11 Jun 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
31 May 2027 – 11 Jun 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
31 May 2027 – 11 Jun 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
31 May 2027 – 11 Jun 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
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31 May 2027 – 11 Jun 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
14 Jun 2027 – 25 Jun 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
14 Jun 2027 – 25 Jun 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
14 Jun 2027 – 25 Jun 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
14 Jun 2027 – 25 Jun 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
14 Jun 2027 – 25 Jun 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
14 Jun 2027 – 25 Jun 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
14 Jun 2027 – 25 Jun 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
14 Jun 2027 – 25 Jun 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
14 Jun 2027 – 25 Jun 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
28 Jun 2027 – 9 Jul 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
28 Jun 2027 – 9 Jul 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
28 Jun 2027 – 9 Jul 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
28 Jun 2027 – 9 Jul 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
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28 Jun 2027 – 9 Jul 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
28 Jun 2027 – 9 Jul 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
12 Jul 2027 – 23 Jul 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
12 Jul 2027 – 23 Jul 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
12 Jul 2027 – 23 Jul 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
12 Jul 2027 – 23 Jul 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
12 Jul 2027 – 23 Jul 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
12 Jul 2027 – 23 Jul 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**

12 Jul 2027 – 23 Jul 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
12 Jul 2027 – 23 Jul 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
12 Jul 2027 – 23 Jul 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
26 Jul 2027 – 6 Aug 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
26 Jul 2027 – 6 Aug 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
26 Jul 2027 – 6 Aug 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
26 Jul 2027 – 6 Aug 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
26 Jul 2027 – 6 Aug 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
26 Jul 2027 – 6 Aug 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
26 Jul 2027 – 6 Aug 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
26 Jul 2027 – 6 Aug 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
26 Jul 2027 – 6 Aug 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
9 Aug 2027 – 20 Aug 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
9 Aug 2027 – 20 Aug 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
9 Aug 2027 – 20 Aug 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
9 Aug 2027 – 20 Aug 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
9 Aug 2027 – 20 Aug 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
9 Aug 2027 – 20 Aug 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
9 Aug 2027 – 20 Aug 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
9 Aug 2027 – 20 Aug 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
9 Aug 2027 – 20 Aug 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
23 Aug 2027 – 3 Sep 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
23 Aug 2027 – 3 Sep 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
23 Aug 2027 – 3 Sep 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
23 Aug 2027 – 3 Sep 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
23 Aug 2027 – 3 Sep 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
23 Aug 2027 – 3 Sep 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
23 Aug 2027 – 3 Sep 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
23 Aug 2027 – 3 Sep 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
23 Aug 2027 – 3 Sep 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
6 Sep 2027 – 17 Sep 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
6 Sep 2027 – 17 Sep 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**

6 Sep 2027 – 17 Sep 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
6 Sep 2027 – 17 Sep 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
6 Sep 2027 – 17 Sep 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
6 Sep 2027 – 17 Sep 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
6 Sep 2027 – 17 Sep 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
6 Sep 2027 – 17 Sep 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
6 Sep 2027 – 17 Sep 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
20 Sep 2027 – 1 Oct 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
20 Sep 2027 – 1 Oct 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
20 Sep 2027 – 1 Oct 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
20 Sep 2027 – 1 Oct 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
20 Sep 2027 – 1 Oct 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
20 Sep 2027 – 1 Oct 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
20 Sep 2027 – 1 Oct 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
20 Sep 2027 – 1 Oct 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
20 Sep 2027 – 1 Oct 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
4 Oct 2027 – 15 Oct 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
4 Oct 2027 – 15 Oct 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
4 Oct 2027 – 15 Oct 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
4 Oct 2027 – 15 Oct 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
4 Oct 2027 – 15 Oct 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
4 Oct 2027 – 15 Oct 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
4 Oct 2027 – 15 Oct 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
4 Oct 2027 – 15 Oct 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
4 Oct 2027 – 15 Oct 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
18 Oct 2027 – 29 Oct 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
18 Oct 2027 – 29 Oct 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
18 Oct 2027 – 29 Oct 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
18 Oct 2027 – 29 Oct 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
18 Oct 2027 – 29 Oct 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
18 Oct 2027 – 29 Oct 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
18 Oct 2027 – 29 Oct 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**

18 Oct 2027 – 29 Oct 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
18 Oct 2027 – 29 Oct 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
1 Nov 2027 – 12 Nov 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
1 Nov 2027 – 12 Nov 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
1 Nov 2027 – 12 Nov 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
1 Nov 2027 – 12 Nov 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
1 Nov 2027 – 12 Nov 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
1 Nov 2027 – 12 Nov 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
1 Nov 2027 – 12 Nov 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
1 Nov 2027 – 12 Nov 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
1 Nov 2027 – 12 Nov 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
15 Nov 2027 – 26 Nov 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
15 Nov 2027 – 26 Nov 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
15 Nov 2027 – 26 Nov 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
15 Nov 2027 – 26 Nov 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
15 Nov 2027 – 26 Nov 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
15 Nov 2027 – 26 Nov 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
15 Nov 2027 – 26 Nov 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
15 Nov 2027 – 26 Nov 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
15 Nov 2027 – 26 Nov 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
29 Nov 2027 – 10 Dec 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
29 Nov 2027 – 10 Dec 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
29 Nov 2027 – 10 Dec 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
29 Nov 2027 – 10 Dec 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
29 Nov 2027 – 10 Dec 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
29 Nov 2027 – 10 Dec 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
29 Nov 2027 – 10 Dec 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
29 Nov 2027 – 10 Dec 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
29 Nov 2027 – 10 Dec 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
13 Dec 2027 – 24 Dec 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
13 Dec 2027 – 24 Dec 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
13 Dec 2027 – 24 Dec 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**

13 Dec 2027 – 24 Dec 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
13 Dec 2027 – 24 Dec 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
13 Dec 2027 – 24 Dec 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
13 Dec 2027 – 24 Dec 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
13 Dec 2027 – 24 Dec 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
13 Dec 2027 – 24 Dec 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**

* Corporate discounts and customized cohort scheduling are available for teams of 3 or more participants.

Course Curriculum & Modules

Advanced Big Data Analytics and Processing Training Course

Course Introduction

The Advanced Big Data Analytics and Processing Training Course is a comprehensive, practical, and industry-focused program designed to develop advanced competencies in big data analytics, data engineering, distributed computing, machine learning, real-time data processing, cloud analytics, and business intelligence. The course equips participants with the knowledge and practical skills required to collect, store, manage, process, analyze, and visualize massive datasets generated from business systems, social media, IoT devices, financial platforms, healthcare systems, and other digital environments. Participants explore modern big data technologies and frameworks, including Hadoop, Apache Spark, Python, SQL, NoSQL databases, data lakes, and cloud-based analytics platforms.

Through hands-on exercises, practical demonstrations, and real-world big data case studies, participants learn how to build scalable data pipelines, perform advanced analytics, process streaming data, develop machine learning models, optimize distributed computing environments, and convert complex datasets into actionable business intelligence. The course is particularly valuable for professionals seeking advanced expertise in big data processing, data science, data engineering, predictive analytics, artificial intelligence, cloud computing, and enterprise data management. By the end of the training, participants will be able to design and implement end-to-end big data solutions capable of supporting data-driven decision-making and digital transformation.

Learning Objectives

By the end of the Advanced Big Data Analytics and Processing Training Course, participants will be able to:

- **Explain advanced concepts, architectures, technologies, and emerging trends in big data analytics and processing.**
- **Design scalable and fault-tolerant big data architectures for enterprise environments.**
- **Implement distributed data storage and processing using Hadoop and Apache Spark.**
- **Develop efficient data ingestion, ETL, ELT, transformation, and integration pipelines.**
- **Apply advanced Python and SQL programming techniques to large-scale datasets.**
- **Use NoSQL and distributed databases to manage high-volume and diverse data.**
- **Implement real-time data ingestion and stream processing for high-velocity datasets.**
- **Apply machine learning and predictive analytics techniques to large datasets.**
- **Create advanced data visualizations and business intelligence dashboards from big data.**
- **Apply big data security, governance, quality, scalability, and performance optimization principles.**

Target Audience

This advanced big data training course is suitable for:

- **Data Scientists and Data Analysts**
- **Big Data Engineers**
- **Data Engineers**
- **Database Administrators**
- **Business Intelligence Professionals**
- **Machine Learning and Artificial Intelligence Professionals**
- **Software and Application Developers**
- **IT Managers and Technology Professionals**
- **Cloud Computing and DevOps Professionals**
- **Researchers, Academics, Business Analysts, and Data-Driven Decision-Makers**

Course Modules

Module 1: Advanced Big Data Concepts, Trends and Ecosystems

- Evolution and characteristics of big data
- The 5Vs of big data: Volume, Velocity, Variety, Veracity, and Value
- Structured, semi-structured, and unstructured data
- Big data analytics lifecycle
- Batch, interactive, and real-time analytics
- Modern big data ecosystems and technologies
- Emerging trends in big data, AI, and data analytics

Case Study

Retail Big Data Analytics: Analyze millions of customer transactions to identify purchasing patterns, customer segments, seasonal trends, and revenue opportunities.

Module 2: Big Data Architecture and Distributed Computing

- Principles of distributed computing
- Distributed versus centralized data processing
- Horizontal and vertical scalability
- Cluster computing architecture
- Data partitioning and replication
- Fault tolerance and high availability
- Designing enterprise-scale big data architectures

Case Study

Banking Analytics Platform: Design a distributed architecture capable of processing millions of daily banking transactions while maintaining scalability, reliability, and high availability.

Module 3: Hadoop Ecosystem and Distributed Data Storage

- Introduction to the Apache Hadoop ecosystem
- Hadoop Distributed File System (HDFS)
- Hadoop cluster architecture
- Data blocks, replication, and fault tolerance
- YARN resource management
- MapReduce processing framework
- Hadoop data storage and processing optimization

Case Study

Telecommunications Data Processing: Use Hadoop to store and process millions of call-detail records to identify customer usage patterns and optimize network capacity.

Module 4: Advanced Apache Spark and PySpark Processing

- Apache Spark architecture and components
- Spark Core and distributed computing
- Resilient Distributed Datasets (RDDs)
- Spark DataFrames and DataSets
- Spark SQL and large-scale querying
- PySpark programming and transformations
- Spark performance optimization and cluster management

Case Study

E-Commerce Customer Analytics: Use PySpark to process millions of transactions and identify customer purchasing behavior and frequently purchased product combinations.

Module 5: Advanced SQL for Big Data Analytics

- Advanced SQL queries for large datasets
- Complex joins and nested queries
- Common Table Expressions (CTEs)

- Window and analytical functions
- Advanced aggregation techniques
- Query optimization and execution plans
- SQL integration with distributed big data platforms

Case Study

Financial Data Analytics: Develop advanced SQL queries to analyze customer transactions, profitability, product performance, and regional financial trends.

Module 6: Python Programming for Big Data Analytics

- Python fundamentals for large-scale analytics
- NumPy for numerical data processing
- Pandas for data manipulation
- Data cleaning and preprocessing
- Exploratory data analysis using Python
- Python integration with PySpark
- Automating big data analytics workflows

Case Study

Healthcare Data Analytics: Use Python and PySpark to process large healthcare datasets and identify patterns in patient utilization, service demand, and operational performance.

Module 7: NoSQL Databases and Big Data Management

- Introduction to NoSQL databases
- Relational databases versus NoSQL databases
- Document-oriented databases
- Key-value and column-family databases
- Graph databases and relationship analytics
- NoSQL data modeling and scalability
- Distributed database performance and availability

Case Study

Social Media Data Management: Design a NoSQL database for storing and analyzing millions of social media posts, comments, user interactions, and engagement records.

Module 8: Big Data Ingestion, ETL, ELT and Data Pipeline Engineering

- Data ingestion architectures
- Batch and real-time data ingestion
- ETL versus ELT processes
- Data extraction and transformation
- Data integration from multiple sources
- Data pipeline orchestration and monitoring
- Data quality, validation, and error handling

Case Study

Enterprise Data Integration: Develop a data pipeline that combines sales, customer, website, and operational data from multiple systems into a centralized analytics platform.

Module 9: Real-Time Data Analytics and Stream Processing

- Fundamentals of real-time data processing
- Streaming versus batch processing
- Event-driven data architectures
- Apache Kafka fundamentals
- Kafka producers, consumers, , and partitions
- Real-time processing using Spark Streaming
- Monitoring and analyzing high-velocity data

Case Study

Real-Time Financial Fraud Detection: Develop a streaming analytics solution that identifies suspicious financial transactions in real time and generates alerts for further investigation.

Module 10: Advanced Statistical Analytics for Big Data

- Descriptive statistics for large datasets
- Inferential statistics and hypothesis testing
- Correlation and regression analysis
- Time-series analytics
- Outlier and anomaly detection
- Feature engineering and data transformation
- Scalable statistical computing

Case Study

Demand Forecasting: Analyze historical sales data to identify trends, seasonal variations, and demand patterns and develop a forecasting model for future inventory requirements.

Module 11: Machine Learning for Big Data Analytics

- Machine learning concepts for big data
- Supervised learning algorithms
- Unsupervised learning algorithms
- Classification and regression
- Clustering and customer segmentation
- Feature engineering and model selection
- Distributed machine learning and model evaluation

Case Study

Customer Churn Prediction: Analyze large telecommunications customer datasets and develop a machine learning model to identify customers at high risk of leaving the service.

Module 12: Predictive Analytics, Artificial Intelligence and Big Data

- Predictive analytics principles
- Artificial intelligence and big data integration
- Natural Language Processing (NLP)
- Sentiment analysis
- Recommendation systems
- Anomaly and risk detection
- AI-powered decision-support systems

Case Study

Customer Sentiment Analytics: Process large volumes of online reviews and customer comments to identify sentiment, emerging complaints, and opportunities for service improvement.

Module 13: Cloud-Based Big Data Analytics

- Cloud computing and big data analytics
- Cloud data warehouses
- Cloud data lakes and lakehouse architectures
- Cloud-based data processing
- Scalable cloud storage and computing
- Cloud-based ETL and analytics pipelines
- Cloud security, governance, and cost optimization

Case Study

Global Enterprise Data Platform: Design a cloud-based big data platform capable of integrating and analyzing information generated by an organization operating across multiple countries.

Module 14: Big Data Visualization, Business Intelligence and Data Storytelling

- Principles of big data visualization
- Business intelligence concepts

- Interactive dashboards and reports
- Key Performance Indicators (KPIs)
- Advanced charts and analytical visualizations
- Data storytelling and communicating insights
- Real-time business intelligence dashboards

Case Study

Executive Performance Dashboard: Develop an interactive dashboard that integrates sales, financial, customer, and operational data to support executive decision-making.

Module 15: Big Data Security, Governance, Optimization and Capstone Project

- Big data security architecture and controls
- Data privacy and regulatory compliance
- Identity and access management
- Data governance and metadata management
- Data quality, lineage, and lifecycle management
- Big data performance and resource optimization
- End-to-end big data analytics capstone project

Case Study

Enterprise Big Data Transformation: Design an end-to-end big data solution covering data ingestion, distributed storage, data processing, machine learning, visualization, security, governance, and executive reporting.

Training Methodology

· Interactive lectures and presentations.

· Group discussions and brainstorming sessions.

· Hands-on exercises using real-world datasets.

· Role-playing and scenario-based simulations.

· Analysis of case studies to bridge theory and practice.

· Peer-to-peer learning and networking.

· Expert-led Q&A sessions.

· Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@datastatresearch.org or call +254724527104

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to DATASTAT CONSULTANCY LTD account, as indicated in the invoice so as to enable us prepare better for you.

Certification & Learning Methodology

- Hands-on practical delivery with real-world datasets, case studies, and lab exercises.
- Post-training mentorship, access to class resources, and customized follow-up support.
- Participants who successfully complete the course receive an accredited Datastat Certificate of Completion.

How to Enroll & Reserve Your Seat

1. Online Registration: Visit https://datastatresearch.org/courses/advanced-big-data-analytics-and-processing-training-course to register online.
2. Email Booking: Send participant details to training@datastatresearch.org for official invoice & reservation.
3. Support & Assistance: Inquire via phone +254 724 527 104 | +254 734 969 612.