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

ENGINEERING

Training Course on High Voltage DC (HVDC) Transmission Systems

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

Training Course on High Voltage DC (HVDC) Transmission Systems

Engineering • 10 Days Intensive • Accredited Certification

Course Overview

Training Course on High Voltage DC (HVDC) Transmission Systems explores the core principles, technologies, control mechanisms, and applications of HVDC?from classic line-commutated converters (LCC) to next-generation voltage-source converters (VSC).

Key Skills & Software Tools Covered

HVDC • Electrical Transmission • Power Systems • Engineering

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)
7 Dec 2026 – 18 Dec 2026	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
7 Dec 2026 – 18 Dec 2026	Kigali	Classroom / 10d	**$6,000 USD / KES 110,000**
7 Dec 2026 – 18 Dec 2026	Dubai	Classroom / 10d	**$10,000 USD / KES 110,000**
7 Dec 2026 – 18 Dec 2026	Cape Town	Classroom / 10d	**$9,000 USD / KES 110,000**
7 Dec 2026 – 18 Dec 2026	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 110,000**
7 Dec 2026 – 18 Dec 2026	Singapore	Classroom / 10d	**$10,000 USD / KES 110,000**
7 Dec 2026 – 18 Dec 2026	Istanbul	Classroom / 10d	**$10,000 USD / KES 110,000**
7 Dec 2026 – 18 Dec 2026	Bangkok	Classroom / 10d	**$10,000 USD / KES 110,000**
7 Dec 2026 – 18 Dec 2026	Accra	Classroom / 10d	**$8,000 USD / KES 110,000**
4 Jan 2027 – 15 Jan 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
4 Jan 2027 – 15 Jan 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
4 Jan 2027 – 15 Jan 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
4 Jan 2027 – 15 Jan 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
4 Jan 2027 – 15 Jan 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
4 Jan 2027 – 15 Jan 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
4 Jan 2027 – 15 Jan 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
4 Jan 2027 – 15 Jan 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
4 Jan 2027 – 15 Jan 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
18 Jan 2027 – 29 Jan 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
18 Jan 2027 – 29 Jan 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
18 Jan 2027 – 29 Jan 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
18 Jan 2027 – 29 Jan 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
18 Jan 2027 – 29 Jan 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**

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

15 Mar 2027 – 26 Mar 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
15 Mar 2027 – 26 Mar 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
15 Mar 2027 – 26 Mar 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
15 Mar 2027 – 26 Mar 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
15 Mar 2027 – 26 Mar 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
15 Mar 2027 – 26 Mar 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
15 Mar 2027 – 26 Mar 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
15 Mar 2027 – 26 Mar 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
29 Mar 2027 – 9 Apr 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
29 Mar 2027 – 9 Apr 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
29 Mar 2027 – 9 Apr 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
29 Mar 2027 – 9 Apr 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
29 Mar 2027 – 9 Apr 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
29 Mar 2027 – 9 Apr 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
29 Mar 2027 – 9 Apr 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
29 Mar 2027 – 9 Apr 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
29 Mar 2027 – 9 Apr 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
12 Apr 2027 – 23 Apr 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
12 Apr 2027 – 23 Apr 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
12 Apr 2027 – 23 Apr 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
12 Apr 2027 – 23 Apr 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
12 Apr 2027 – 23 Apr 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
12 Apr 2027 – 23 Apr 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
12 Apr 2027 – 23 Apr 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
12 Apr 2027 – 23 Apr 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
12 Apr 2027 – 23 Apr 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
26 Apr 2027 – 7 May 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
26 Apr 2027 – 7 May 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
26 Apr 2027 – 7 May 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
26 Apr 2027 – 7 May 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
26 Apr 2027 – 7 May 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
26 Apr 2027 – 7 May 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**

26 Apr 2027 – 7 May 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
26 Apr 2027 – 7 May 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
26 Apr 2027 – 7 May 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
10 May 2027 – 21 May 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
10 May 2027 – 21 May 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
10 May 2027 – 21 May 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
10 May 2027 – 21 May 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
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10 May 2027 – 21 May 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
10 May 2027 – 21 May 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
10 May 2027 – 21 May 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
10 May 2027 – 21 May 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
24 May 2027 – 4 Jun 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
24 May 2027 – 4 Jun 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
24 May 2027 – 4 Jun 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
24 May 2027 – 4 Jun 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
24 May 2027 – 4 Jun 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
24 May 2027 – 4 Jun 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
24 May 2027 – 4 Jun 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
24 May 2027 – 4 Jun 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
24 May 2027 – 4 Jun 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
7 Jun 2027 – 18 Jun 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
7 Jun 2027 – 18 Jun 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
7 Jun 2027 – 18 Jun 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
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7 Jun 2027 – 18 Jun 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
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7 Jun 2027 – 18 Jun 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
7 Jun 2027 – 18 Jun 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
7 Jun 2027 – 18 Jun 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
21 Jun 2027 – 2 Jul 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
21 Jun 2027 – 2 Jul 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**

21 Jun 2027 – 2 Jul 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
21 Jun 2027 – 2 Jul 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
21 Jun 2027 – 2 Jul 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
21 Jun 2027 – 2 Jul 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
21 Jun 2027 – 2 Jul 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
21 Jun 2027 – 2 Jul 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
21 Jun 2027 – 2 Jul 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
5 Jul 2027 – 16 Jul 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
5 Jul 2027 – 16 Jul 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
5 Jul 2027 – 16 Jul 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
5 Jul 2027 – 16 Jul 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
5 Jul 2027 – 16 Jul 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
5 Jul 2027 – 16 Jul 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
5 Jul 2027 – 16 Jul 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
5 Jul 2027 – 16 Jul 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
5 Jul 2027 – 16 Jul 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
19 Jul 2027 – 30 Jul 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
19 Jul 2027 – 30 Jul 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
19 Jul 2027 – 30 Jul 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
19 Jul 2027 – 30 Jul 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
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19 Jul 2027 – 30 Jul 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
19 Jul 2027 – 30 Jul 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
2 Aug 2027 – 13 Aug 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
2 Aug 2027 – 13 Aug 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
2 Aug 2027 – 13 Aug 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
2 Aug 2027 – 13 Aug 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
2 Aug 2027 – 13 Aug 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
2 Aug 2027 – 13 Aug 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
2 Aug 2027 – 13 Aug 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**

2 Aug 2027 – 13 Aug 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
2 Aug 2027 – 13 Aug 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
16 Aug 2027 – 27 Aug 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
16 Aug 2027 – 27 Aug 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
16 Aug 2027 – 27 Aug 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
16 Aug 2027 – 27 Aug 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
16 Aug 2027 – 27 Aug 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
16 Aug 2027 – 27 Aug 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
16 Aug 2027 – 27 Aug 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
16 Aug 2027 – 27 Aug 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
16 Aug 2027 – 27 Aug 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
30 Aug 2027 – 10 Sep 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
30 Aug 2027 – 10 Sep 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
30 Aug 2027 – 10 Sep 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
30 Aug 2027 – 10 Sep 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
30 Aug 2027 – 10 Sep 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
30 Aug 2027 – 10 Sep 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
30 Aug 2027 – 10 Sep 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
30 Aug 2027 – 10 Sep 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
30 Aug 2027 – 10 Sep 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
13 Sep 2027 – 24 Sep 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
13 Sep 2027 – 24 Sep 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
13 Sep 2027 – 24 Sep 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
13 Sep 2027 – 24 Sep 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
13 Sep 2027 – 24 Sep 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
13 Sep 2027 – 24 Sep 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
13 Sep 2027 – 24 Sep 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
13 Sep 2027 – 24 Sep 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
13 Sep 2027 – 24 Sep 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
27 Sep 2027 – 8 Oct 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
27 Sep 2027 – 8 Oct 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
27 Sep 2027 – 8 Oct 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**

27 Sep 2027 – 8 Oct 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
27 Sep 2027 – 8 Oct 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
27 Sep 2027 – 8 Oct 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
27 Sep 2027 – 8 Oct 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
27 Sep 2027 – 8 Oct 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
27 Sep 2027 – 8 Oct 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
11 Oct 2027 – 22 Oct 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
11 Oct 2027 – 22 Oct 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
11 Oct 2027 – 22 Oct 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
11 Oct 2027 – 22 Oct 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
11 Oct 2027 – 22 Oct 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
11 Oct 2027 – 22 Oct 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
11 Oct 2027 – 22 Oct 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
11 Oct 2027 – 22 Oct 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
11 Oct 2027 – 22 Oct 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
25 Oct 2027 – 5 Nov 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
25 Oct 2027 – 5 Nov 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
25 Oct 2027 – 5 Nov 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
25 Oct 2027 – 5 Nov 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
25 Oct 2027 – 5 Nov 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
25 Oct 2027 – 5 Nov 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
25 Oct 2027 – 5 Nov 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
25 Oct 2027 – 5 Nov 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
25 Oct 2027 – 5 Nov 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
8 Nov 2027 – 19 Nov 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
8 Nov 2027 – 19 Nov 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
8 Nov 2027 – 19 Nov 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
8 Nov 2027 – 19 Nov 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
8 Nov 2027 – 19 Nov 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
8 Nov 2027 – 19 Nov 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
8 Nov 2027 – 19 Nov 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
8 Nov 2027 – 19 Nov 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**

8 Nov 2027 – 19 Nov 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
22 Nov 2027 – 3 Dec 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
22 Nov 2027 – 3 Dec 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
22 Nov 2027 – 3 Dec 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
22 Nov 2027 – 3 Dec 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
22 Nov 2027 – 3 Dec 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
22 Nov 2027 – 3 Dec 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
22 Nov 2027 – 3 Dec 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
22 Nov 2027 – 3 Dec 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
22 Nov 2027 – 3 Dec 2027	Accra	Classroom / 10d	**$8,000 USD / KES 220,000**
6 Dec 2027 – 17 Dec 2027	Nairobi	Classroom / 10d	**$3,000 USD / KES 220,000**
6 Dec 2027 – 17 Dec 2027	Kigali	Classroom / 10d	**$6,000 USD / KES 220,000**
6 Dec 2027 – 17 Dec 2027	Dubai	Classroom / 10d	**$10,000 USD / KES 220,000**
6 Dec 2027 – 17 Dec 2027	Cape Town	Classroom / 10d	**$9,000 USD / KES 220,000**
6 Dec 2027 – 17 Dec 2027	Addis Ababa	Classroom / 10d	**$6,000 USD / KES 220,000**
6 Dec 2027 – 17 Dec 2027	Singapore	Classroom / 10d	**$10,000 USD / KES 220,000**
6 Dec 2027 – 17 Dec 2027	Istanbul	Classroom / 10d	**$10,000 USD / KES 220,000**
6 Dec 2027 – 17 Dec 2027	Bangkok	Classroom / 10d	**$10,000 USD / KES 220,000**
6 Dec 2027 – 17 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

Training Course on High Voltage DC (HVDC) Transmission Systems

Introduction

High Voltage Direct Current (HVDC) transmission is revolutionizing the way power is delivered over long distances and across borders. As the demand for renewable integration, grid interconnection, and energy efficiency grows, HVDC systems offer unmatched benefits in bulk power transmission, lower losses, and voltage control. Training Course on High Voltage DC (HVDC) Transmission Systems explores the core principles, technologies, control mechanisms, and applications of HVDC—from classic line-commutated converters (LCC) to next-generation voltage-source converters (VSC).

Participants will gain a deep understanding of converter station design, system modeling, power electronics, and dynamic control strategies essential for planning, operating, and maintaining HVDC systems. Emphasis is placed on real-world case studies, hands-on simulations, and the role of HVDC in supporting smart grid development, offshore wind farms, and cross-border power trading. Through this course, energy professionals will be equipped to lead projects in grid modernization, resilience, and global energy connectivity.

Course duration

10 Days

Course Objectives

Understand the fundamentals of HVDC systems and their advantages

Differentiate between LCC and VSC technologies

Design HVDC converter stations and components

Analyze control and protection schemes in HVDC systems

Model HVDC links using simulation tools (e.g., PSCAD, MATLAB)

Evaluate the role of HVDC in renewable energy integration

Understand hybrid AC/DC grid architectures

Identify harmonics, filtering, and mitigation techniques

Assess transient and dynamic stability impacts of HVDC

Explore offshore HVDC applications (e.g., wind power)

Study real-world HVDC projects and challenges

Gain insights into maintenance and asset management of HVDC systems

Understand environmental and economic considerations of HVDC deployment.

Organizational Benefits

Access to specialized HVDC technical skills

Enhanced planning and execution of HVDC projects

Improved grid reliability through advanced control systems

Efficient long-distance power transmission capabilities

Reduced transmission losses and improved voltage stability

Better integration of renewables and offshore resources

Competitive advantage in cross-border energy markets

Reduction in environmental and right-of-way impacts

Risk mitigation through trained personnel in protection and fault analysis

Strengthened engineering capacity for utility and infrastructure projects.

Target Participants

Power system engineers and planners

Transmission and distribution (T&D) professionals

Electrical utility managers

Renewable energy developers

Substation and protection engineers

Energy project consultants

Power electronics specialists

Grid modernization and smart grid team

Course Outline

Module 1: Introduction to HVDC Technology

1. History and evolution of HVDC
2. AC vs. DC transmission: Key differences
3. Applications and use cases of HVDC
4. Types of HVDC systems (monopole, bipole, back-to-back)
5. Case Study: Itaipu HVDC System – Brazil-Paraguay

Module 2: Components of HVDC Systems

1. Converter stations
2. Converter transformers
3. Smoothing reactors and filters
4. Grounding electrodes
5. Case Study: ABB's Ultranet HVDC Technology

Module 3: Line Commutated Converters (LCC)

1. Operation principles
2. 6-pulse vs. 12-pulse converters
3. Commutation failure analysis
4. Harmonics and filtering

5. Case Study: China’s Xiangjiaba–Shanghai ±800 kV Project

Module 4: Voltage Source Converters (VSC)

1. Modular Multilevel Converter (MMC) architecture
2. Benefits of VSC over LCC
3. Pulse Width Modulation (PWM)
4. VSC for offshore wind integration
5. Case Study: BorWin1 Offshore Wind HVDC

Module 5: HVDC Control and Protection

1. Current and voltage control modes
2. Fault detection and clearing strategies
3. DC circuit breakers
4. Hierarchical control architecture
5. Case Study: Control Scheme of INELFE France-Spain HVDC

Module 6: Modeling and Simulation of HVDC Systems

1. Using PSCAD for HVDC simulation
2. MATLAB/Simulink modeling
3. Dynamic vs. steady-state analysis
4. System behavior under faults
5. Case Study: Simulation of Bipolar HVDC in PSCAD

Module 7: Integration of Renewables with HVDC

1. Offshore wind HVDC systems
2. Grid code compliance for HVDC-connected renewables
3. Power flow and voltage control
4. Inertia and frequency stability considerations
5. Case Study: DolWin1 Integration in the North Sea

Module 8: HVDC in Smart Grids and Supergrids

1. Role in future energy systems
2. AC/DC hybrid grids
3. HVDC hubs and interconnectors
4. Market-based dispatch and control
5. Case Study: EuroAsia Interconnector

Module 9: Harmonics and Filtering

1. Harmonic generation in HVDC converters
2. Passive vs. active filters
3. Design of harmonic filters
4. Impact on nearby AC systems
5. Case Study: Harmonic Mitigation at Hokkaido–Honshu Link

Module 10: Thermal and Electrical Design Considerations

1. HVDC cable types (overhead, submarine)
2. Insulation coordination
3. Heat dissipation in power electronics
4. Electrical stress and aging
5. Case Study: Submarine HVDC Cable Failures and Lessons

Module 11: Environmental and Economic Aspects

1. Environmental impact assessments
2. Right-of-way and land use
3. Cost-benefit analysis of HVDC vs AC

4. Carbon footprint and energy savings
5. Case Study: Sustainability of NordLink HVDC Project

Module 12: Asset Management and Maintenance

1. Condition monitoring systems
2. Predictive and preventive maintenance
3. Spare parts and diagnostics
4. Lifecycle management of HVDC assets
5. Case Study: Maintenance Practices of Cahora Bassa HVDC

Module 13: HVDC Commissioning and Testing

1. Pre-commissioning activities
2. Functional and performance testing
3. Interface testing with AC grid
4. Dynamic commissioning trials
5. Case Study: Testing Protocols in INELFE HVDC

Module 14: Protection and Grounding in HVDC Systems

1. Grounding electrode design
2. Protection coordination
3. Overvoltage protection
4. Fault ride-through mechanisms
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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/training-course-on-high-voltage-dc-hvdc-transmission-systems 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.