

DATA SCIENCE & ANALYTICS

PROSPECTUS
2026/2027

www.alphatech.ac.ke



About the Programme

Turn Data Into Decisions. Shape the Future.

Data is one of the world's most valuable resources, driving innovation, business growth, and informed decision-making across every industry. Organizations rely on skilled professionals who can collect, analyse, interpret, and transform data into meaningful insights that solve real-world challenges.

The Data Science & Analytics programme at AlphaTech Training Institute equips students with practical skills in data analysis, statistical modelling, machine learning, business intelligence, and data visualization. Through hands-on projects, industry tools, and real datasets, students graduate ready to help organizations make smarter, data-driven decisions.

Why Study Data Science & Analytics?

- Develop one of the world's fastest-growing and most in-demand technology skills.
- Learn how to transform data into meaningful business insights.
- Gain practical experience using industry-standard analytics and AI tools.
- Build a professional portfolio through real-world data projects.
- Prepare for careers across technology, finance, healthcare, research, and business.
- Develop analytical and problem-solving skills valued by employers worldwide.
- Gain future-ready skills in Artificial Intelligence and predictive analytics.



Who Should Enroll?

- This programme is ideal for:
- KCSE graduates passionate about design and creativity
- University students seeking practical design skills
- Career changers pursuing creative professions
- Working professionals looking to upskill
- Entrepreneurs interested in interior design and space planning

Qualification

1. Data Science and Analytics Bootcamp

- **Duration:** 1 Academic Year (3 Semesters)
- **Award:** AlphaTech Training Institute Certificate
- **Mode of study :** Full-time, Part-time, Weekend
- **Entry Requirements :** Any KCSE grade (or equivalent qualification).





Career Opportunities

Graduates can work as:

- Data Analyst
- Business Intelligence Analyst
- Data Scientist
- Machine Learning Associate
- Data Visualization Specialist
- Research Analyst
- Business Analyst
- Marketing Analyst
- Financial Data Analyst
- Operations Analyst
- AI & Data Associate
- Data Consultant

Graduates may find employment in:

- Technology companies
- Financial institutions
- Government agencies
- Healthcare organizations
- Research institutions
- Telecommunications companies
- Manufacturing companies
- E-commerce businesses
- NGOs
- Consulting firms
- Startups

Why AlphaTech?

Students choose AlphaTech because we offer:

- **Technology-Driven Learning:** Learn using modern digital design tools and industry-relevant technologies.
- **Practical Studio Experience:** Develop your skills through hands-on projects and real-world design challenges.
- **Industry-Relevant Curriculum:** Study a programme aligned with international professional standards.
- **Experienced Trainers:** Learn from qualified professionals with academic and industry expertise.
- **Portfolio Development:** Graduate with a professional portfolio that showcases your creativity and technical ability.
- **Career-Focused Education:** Develop the practical competencies employers and clients expect from today's interior designers.



What You'll Learn

1. Data Foundations

Build a strong understanding of data, statistics, and analytical thinking while learning how data is collected, organised, and managed.

You'll develop skills in:

- Data literacy
- Data collection
- Data management
- Data quality
- Statistical thinking
- Problem-solving with data

2. Data Analysis & Visualization

Learn how to clean, analyse, and communicate data through compelling visual insights that support informed decision-making.

You'll develop skills in:

- Data cleaning
- Exploratory data analysis
- Dashboard creation
- Data storytelling
- Interactive visualisations
- Business reporting

3. Statistical Analytics

Develop the analytical techniques used to interpret trends, measure performance, and support evidence-based decisions.

You'll develop skills in:

- Descriptive statistics
- Probability concepts
- Hypothesis testing
- Predictive analysis
- Trend analysis
- Statistical modelling

4. Machine Learning

Discover how intelligent systems learn from data to make predictions, identify patterns, and automate decision-making.

You'll develop skills in:

- Machine learning fundamentals
- Supervised learning
- Unsupervised learning
- Model evaluation
- Predictive modelling
- AI-driven analytics



5. Business Intelligence

Learn how organisations use data to improve performance, optimise operations, and drive strategic growth.

You'll develop skills in:

- Business intelligence concepts
- Performance reporting
- KPI development
- Decision support systems
- Data-driven strategy
- Business analytics

6. Data Projects

Apply your knowledge through practical projects using real datasets to solve business and industry challenges.

You'll develop skills in:

- Project planning
- Data analysis workflows
- Team collaboration
- Professional reporting
- Portfolio development
- Industry case studies

Learning Experience

Students learn through:

- Live instructor-led practical sessions
- Hands-on data analysis laboratories
- Real-world datasets and case studies
- Practical analytics projects
- Machine learning workshops
- Collaborative team projects
- Portfolio development
- Capstone data project
- Industrial attachment opportunities
- Career coaching and mentorship
- Industry guest speakers
- Continuous practical assessments



Contact Us



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