**🌟 Course Overview**

This course equips students aged 9–14 with foundational data analysis skills while grounding their learning in Islamic ethics and heritage. Through hands-on projects, participants will explore how data and artificial intelligence (AI) can address real-world challenges, guided by Quranic principles of justice, honesty, and service to humanity.

**Key Objectives**:

1. **Technical Skills**: Master Python, data visualization, and AI tools.
2. **Ethical Framework**: Apply Islamic values to modern technology.
3. **Critical Thinking**: Solve problems inspired by Muslim contributions to science and society.

**📆 Curriculum Summary**

**Session 1: Introduction to Data Analysis**

* **Skills**: Dataset creation, basic statistics (mean, max/min), bar charts.
* **Islamic Focus**: Analyzing Quranic Surah lengths to appreciate divine wisdom in diversity.

**Session 2: Data Cleaning & Integrity**

* **Skills**: Handling missing data, removing duplicates, column renaming.
* **Islamic Focus**: Importance of honesty (Quran 17:36) in data representation.

**Session 3: Exploring Islamic Scientific Heritage**

* **Skills**: Filtering, grouping, and aggregation.
* **Islamic Focus**: Celebrating scholars like Al-Khwarizmi (algebra) and Ibn Sina (medicine).

**Session 4: Data Visualization for Impact**

* **Skills**: Designing bar, pie, and line charts.
* **Islamic Focus**: Clarity in communication (Quran 16:90) through visuals.

**Session 5: Introduction to AI & Ethical Analysis**

* **Skills**: Correlation analysis, AI-generated insights.
* **Islamic Focus**: Verifying information (Quran 49:6) in the age of AI.

**Session 6: Capstone Project**

* **Skills**: Full data analysis cycle + AI integration.
* **Islamic Focus**: Microfinance and Quranic principles of charity (2:245).