Course Introduction Video

Python and SAS for Clinical Trials:

Python for Clinical Trials: A Modern Alternative to SAS for Data Analysis & Reporting

Welcome!

- Hello and welcome!
- For clinical research professionals, data is everything.
- SAS: Long-standing industry standard.
- But the landscape is evolving…

Why Python for Clinical Trials?

- **Unparalleled Flexibility**
- **Vast Ecosystem of Free, Powerful Libraries**
- **End-to-End Capabilities:** Data, Stats, ML, Reporting
- **"One-Stop Shop"**
- **Impact:** Enhanced Efficiency & Analytical Power

Who is This Course For?

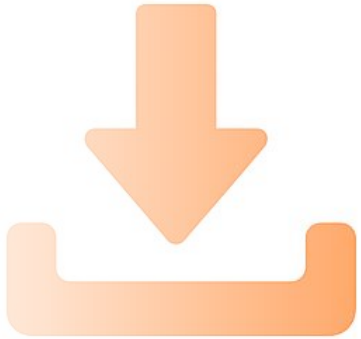
- **Seasoned SAS Programmers:** Expand skillset, transition to open-source.
- **Data Scientists/Analysts:** Apply Python expertise to clinical research.
- **Clinical Data Managers:** Automate data quality & transformations.
- **Biostatisticians:** Seek powerful, flexible tools for modeling & visualization.
- **Anyone:** Building robust, reproducible, regulatory-compliant data pipelines.

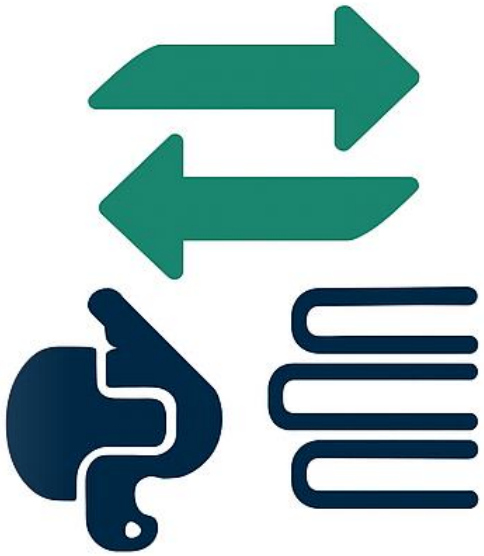
What You'll Learn: Course Modules

- Introduction & Environment Setup
- Data Handling & Manipulation (Pandas/NumPy, SAS Comparisons)
- Statistical Analysis (SciPy, Statsmodels, Lifelines)
- Data Visualization (Matplotlib, Seaborn)
- CDISC Standards (SDTM & ADaM Generation)
- Advanced Topics & Regulatory Compliance (ML, NLP, Automated Reporting, 21 CFR Part 11, GxP)
- End-to-End Capstone Project
- Module 7: End-to-End Capstone Project

Course Features & Benefits

- **Highly Practical:** Hands-on Coding Exercises
- **Real-World Data:** Dummy Clinical Datasets
- **Direct Comparisons:** Python vs. SAS Code Examples
- **Downloadable:** All Source Code, Data, Resources
- **Prerequisite:** Basic Python knowledge (refresher included!)





Your Future in Clinical Data Science

- **Modernize Your Skills**
- **Open New Career Opportunities**
- **Contribute to Advancing Healthcare**
- **Call to Action:** Enroll Now!