



PerixAnalytic

ADVANCED PROGRAMS IN

**FINANCE • ECONOMICS • DATA • AI •
DECISION-MAKING**

Where Questions Cross Disciplines:

PerixAnalytic explores questions that cross disciplinary boundaries. The objective is not simply to acquire another technique. It is to understand why the technique exists, what it can reveal, where its assumptions begin to matter, and where its explanatory power ends.



Course 12

WHEN SYSTEMS FIGHT BACK

Complexity, Feedback & Decision-Making in Adaptive Systems

Some systems cannot be understood by examining their components independently. Markets react to investors. Competitors react to strategy. Consumers react to prices. Technology changes behavior—and behavior changes technology. The system therefore evolves in response to the actions occurring within it.

Perspectives

- Complex Adaptive Systems
- Networks
- Feedback Loops
- Emergence
- Nonlinearity
- Path Dependence
- Agent-Based Modeling

Systems Laboratory

Participants examine:

Agent → Interaction → Feedback → Adaptation → Emergence

The laboratory explores how local decisions can produce unexpected system-level outcomes and why apparently rational actions can generate collective consequences that no individual actor intended.



Central Question

What happens when the system changes because of the decisions made inside it?



Format: Interdisciplinary Systems Laboratory

Level: Advanced

Audience: Researchers, strategists, economists, technology professionals, analysts, graduate students