

Introduction to Mathematical Finance

A Quantitative Approach to Financial Markets

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- **Note:** This is an introductory session - many topics will be touched on but not covered in detail.

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 - Stochastic Calculus
 - Optimization Theory
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 - Numerical Methods
- **Beyond traditional finance:** It offers rigorous and quantitative methods to analyze complex financial products and strategies.

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- **Competitive Advantage:** Quantitative skills are highly valued in the financial industry.

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- **Credit Risk:** Assessing the risk of default on loans and other credit products.

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- **Further Study:** Markov models, Gaussian Processes, Stochastic processes, etc.

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- **Programming:** Python, R and other languages are fundamental tools.

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- "*Methods of Mathematical Finance*" by Ioannis Karatzas and Steven E. Shreve