

Computational Finance Spring 2021

Video lectures on Youtube

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These lectures are based on the book *Mathematical Modeling and Computation in Finance* by Kees Oosterlee and Lech Grzelak. There is also a [companion website](#) with solutions to selected exercises and a lot more. The slides of the lectures and python code have been made available on the [Computational Finance page](#) of Lech's [github](#) page.

The video lectures, all on *YouTube*, are the following.

- Lecture 1/14: [Introduction and Overview of Asset Classes](#)
- Lecture 2/14: [Stock, Options and Stochastics](#)
- Lecture 3/14: [Option Pricing and Simulation in Python](#)
- Lecture 4/14: [Implied Volatility](#)
- Lecture 5/14: [Jump Processes](#)
- Lecture 6/14: [Affine Jump Diffusion Processes](#)
- Lecture 7/14: [Stochastic Volatility Models](#)
- Lecture 8/14: [Fourier Transformation for Option Pricing](#)
- Lecture 9/14: [Monte Carlo Simulation](#)
- Lecture 10/14: [Monte Carlo Simulation of the Heston Model:](#)
- Lecture 11/14: [Hedging and Monte Carlo Greeks](#)
- Lecture 12/14: [Forward Start Options and Model of Bates](#)
- Lecture 13/14: [Exotic Derivatives](#)
- Lecture 14/14: [Summary of the Course](#)