

Unit MTH316 Financial Derivative Pricing - 1

This unit concerns determining fair prices for derivative securities. It builds on the knowledge and techniques developed in the Level 2 Unit Introduction to Investments.



Lecturer: Doctor Andrew Burbanks Department of Mathematics

In this unit, we will begin by recapping some of the material you will have already met in the Level 2 unit on Introduction to Investments. We will talk about how to determine the value of European options at expiry, will introduce the concept of Put-Call Parity, and will then go on to derive the Black-Scholes partial differential equation (PDE) which we will use to price options before expiry in a variety of contexts.

In addition to the lectures and handouts, you will be expected to supplement your studies by looking at the literature, including the recommended books.

Further information

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Students who are interested in doing a final year project in this area should find an area that they are interested in and should then spend a number of hours in the library or on the internet studying that area in order to find useful material in the literature.

You should find at least one solid research paper or book chapter on the topic you would like to study and should come up with a short written description of what you would like to do.

At this point, you should approach someone who you would like to be your supervisor, and ask them whether the material you have collected could form the basis for a project.