

$$U_t^{\text{BS}}(x; \sigma^2) = x\mathcal{N}(d_+) - Ke^{-r(T-t)}\mathcal{N}(d_-)$$



Welcome to the course

**TU-E2210 Financial Engineering I; 3, 5 or 6 credits**

Fall 2018, periods I and II

lectures on Wednesdays at 12-14, exercises on Fridays at 10-12, TUAS building

Financial Engineering is a multidisciplinary field involving financial theory, engineering methods, applied mathematics and the practice of programming.

The courses in Financial Engineering at Aalto are designed for students who wish to obtain positions in banking, financial management and consulting industries, or to work as quantitative analysts in finance departments of general manufacturing and service firms. Students who simply want to practice their skills in mathematics and finance are also most welcome.

The aim of the course Financial Engineering I is to acquire an understanding of the intuition behind financial derivatives, as well as a working knowledge in option pricing, hedging, and volatility estimation. An optional assignment will be carried out using Matlab and real market data.

The course is based on the mathematical level obtained during the basic courses of engineering mathematics at Aalto. Students from diverse backgrounds have attended previous editions, for example, the departments of industrial engineering and management, mathematics and technical physics, finance, economics, electrical engineering, energy technology, and real estate, planning and geoinformatics.

I will be happy to give more information on the course.

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