1023-I5-1354

Youngna Choi\* (choiy@mail.montclair.edu), Department of Mathematical Sciences, Montclair State University, 1 Normal Avenue, Montclair, NJ 07043. Starting a B.S. in Mathematics-Mathematics of Finance Concentration Track: case of Montclair State University. Preliminary report.

The presentation describes the development of B.S. in Mathematics-Mathematics of Finance Concentration Track at Montclair State University, Montclair, NJ. The program consists of major requirements from required mathematics and computer science courses, specialization courses in financial mathematics and statistics, and collateral requirements from the school of business.

The core of the Mathematics of Finance Major program is the new sequential specialization courses. The first part Mathematics of Finance I covers theory of interest rate, annuity, fixed income security valuation, capital asset pricing model (CAPM), and portfolio theory. The second part Mathematics of Finance II continues more elaborate theory of interest, forward/futures contract, hedging with futures, fixed income market analysis, duration, immunization, stock options, put-call parity, binomial trees, and Black-Scholes formula. These courses can be used as a part of preparation for Society of Actuaries/Casualty Actuarial Society Actuarial Examinations Course 2 and Course 3.

Although the program will become official in September 2007, there have been preliminary results in both financial and actuarial sectors. The outcomes to date as well as plans and modification for the future will be discussed. (Received September 25, 2006)