



INTERDISCIPLINARY ACTIVITY SAMPLE BACHELOR PROGRAM OF REAL ESTATE MANAGEMENT

INTERDISCIPLINARY ACTIVITY IN THE COURSES FINANCIAL MATHEMATICS, REAL ESTATE APPRAISAL, AND REAL ESTATE MARKETING

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WEIGHT OF IA IN THREE COURSES: 50 %**

DATE OF COMMENCEMENT OF ACTIVITY: 15.03.2017 DATE OF END OF ACTIVITY: 15.06.2017

Build a simulation model with VBA add-in software in Excel to find the real time value of commercial buildings in the center of Prishtina where the rent price is 10 €/m² per month. The simulation should take into account three possible scenarios: pessimistic, realistic, and optimistic and the variance is 5 %. The probability distribution in all scenarios is uniform. The probability distribution with the rent is continuous and the difference between minimum and maximum is 10 % for net rent in all three scenarios. The growth rate is 5 % according to realistic scenario whereas three scenarios differ from one another only by 1 %. The probability distribution at the growth rate differ by 0.5 % with one another. The risk rate is 11 %. The probability distribution of risk rate is triangular whereby the difference between minimum, maximum, and mean is only 0.7 %.

The groups must build the model to forecast potential values of commercial shops in the center of Prishtina and find the standard deviation by performing 1 thousand simulations with add-in VBA in Excel.

Also, if the real estate developer of Ramiz Sadiku New Co has 50,000 m² available for renting and variable expenses are 1,500,000 euro with standard deviation of 500,000 euro and fixed operating expenses of 1,200,000 euro, with data table in Excel find 100 different scenarios to find a net profit of the firm. In the end, find the probability of the profit of the firm to be 3,500, 000 euros and the profit of the firm to be 3,000,000. How much should New Ramiz Sadiku should price the rent of commercial buildings in order to have the probability of 45 % to have the Return on Investment of 35 %, if the cost of construction of commercial buildings in the center of Prishtina is 600 EUR/m².

The final activity should submit the model in Excel with the add-in VBA software.