In this thesis we will deal with the term of operational risk, as it is presented in the directives Basel 2 that are mandatory for financial institutions in the European Union. The main problem is operational risk modeling, therefore, how to measure and manage it. In the first part we will look at the possibility of calculating the capital requirements for operational risk under Basel 2, mainly the calculation with the internal model. We will describe the specific procedures for the development of the internal model and we will focus on Loss Distribution Approach. The internal model will be based on modeling of loss in each risk cell separately. In the second part we will show, how to include modeling of dependence structure between risk cells to the internal model with using copulas. Finally, we will show the illustrative example, where we will see, whether the modeling of dependence leads to a reduction of the total capital requirement.