Abstract: This bachelor thesis deals with selected methods of pricing of financial derivatives. It begins with introduction to financial derivatives, simple methods of pricing them and establishing terminology. It follows with summary of mathematical definitions and theorems necessary for deriving selected models for option pricing. In chapter dealing with diffusion models, there are introduced Black-Scholes Model, Binomial Model, and CEV model. The following chapters deal with Merton’s Jump-Diffusion Model, i.e., a diffusion model enriched with jumps, and Variance-Gamma Model as the representative of (pure) jump models. This thesis is interspersed with numerical examples.