

This master thesis focus on special type of rings called path algebras with a goal to define and describe codes over these rings. The path algebras are defined by graphic structures called quivers which is transferred also on the modules of the path algebra. Codes themselves are defined over indecomposable injective modules of path algebra considering the latest result in ring-coding theory. So defined codes allow us to study the parameters and the versions of elementary theorems from theory of linear codes over fields for codes over rings. These are about duals codes especially, the MacWilliams identity theorem and about code equivalency. Finally we get back to path algebras and describe a way to make them applicable in theory of codes over rings.