

# Abstract

The goal of this thesis is to investigate some single-valued and multi-valued operators in Banach Spaces. Using the enrichment technique, examine their fixed points. After that, devise some iterative processes to approach their fixed points. In particular, we will be interested in enriching the existing operators and studying their applications. We anticipate that several well-known results in the comparable existing literature on the subject will follow as corollaries to our results. Our results can be viewed as a unification and extension of existing results. Moreover, we shall find applications of our results in showing the existence of solutions to some nonlinear functional equations and inclusions.