**Abstract**

When I decided to do researches on this thesis which is about the design and study of plastic injection molds , I had an objective in my mind, which is to learn how to make complex designs, injection molding guidelines, machining and manufacturing processes and by that I mean manipulating CNC machines especially in the field of mold making where precision is required , I have chosen this field because, injection molding is the best plastic mass manufacturing process in the world our country included even if it is not very developed and also because almost everything around us is made by a mold, which means that I can easily launch my career as an mechanical engineer