## CHAPTER III

## RESEARCH METHODOLOGY

For steps in this research are divided into two major stages i.e. first, collect the information and designing and the second is implementation and testing.

For doing the first time is search for journals and articles relating to the problems that encountered and consult lecturers to determine the design of the research. In addition, also looking for books in library as references of the research that want to do. After got enough material and reference, and then proceed by studying references and materials already collected for later using for the making of the program. That are studied include data structures and algorithms/methods will be used relating to researchand then determine the draft working of making the program.

At the second stage, namely the implementation and testing starts with creating programs for each method that will be used by using the image data in addition to the signature image. Then from the methods that already exist can be created a basic program using dummy data to analyzed the result wheter is correct or not. The basic program will be fixed in order to become a whole program. After the program has been done, so it can be used in the process of implementation and testing by using real data i.e. image signature. The program can determine the level of similarity between the signature images which is test image and reference image.